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**Settling Environment-Related Investment Disputes  
Current Approaches and A Way Forward**

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# **Settling Environment-Related Investment Disputes: Current Approaches and A Way Forward**

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Thesis Submitted for the Degree of Ph.D.

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I, Hamideh Barmakhshad, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis and also that unless otherwise stated, all references cited have been consulted by the candidate; that the work of which the thesis is a record has been done by the candidate, and that it has not been previously accepted for a higher degree.

## Abstract

Several years have passed since the relationship between the laws governing foreign investment and environmental protection started to receive well-deserved attention. Despite a vast quantity of recommended methods and emphasis on the importance of environmental considerations, recent awards have proved that the outcomes can still be surprising. Within this context, and as a possible response to this fear of unsettled conflict, this study explores the possibility of application of one particular principle of international environmental law, namely the Precautionary Principle. The overarching aim of this thesis is to provide a comprehensive analysis of the content and the function of the precautionary principle. This will to provide an interpretative tool for investment tribunals.

To this end, this thesis adopts a two-pronged approach. The first approach will analyse environment-related investment disputes to find the current state of play and understand the existing patterns. This analysis will demonstrate that when interpreting treaty provisions in disputes with environmental components, tribunals need to take into account the peculiarities of environmental regulation and the different mechanisms in the field.

Having concluded the current state of play in environment-related investment dispute settlement. The second part of this thesis, which consists of two chapters, will explore the evolution of environmental policing, and will identify the different mechanisms that have been established to ensure effective protection. It will examine the precautionary principle as one of the crucial methods for responding to the limitations of previous mechanisms. It will also discuss the principle's core elements and different functions (procedural and substantive) under the international law. Following a comprehensive analysis of different international environmental instruments, a precautionary test will be introduced, for application by investment tribunals.

This study is first and foremost an attempt to contribute to the current dialogue by providing a conceptual framework for the precautionary principle. Despite some piecemeal studies on the role that the principle could play in investment treaty arbitration, no systemic research has yet been conducted to provide a conceptual framework for its application under an investment treaty. Moreover, while touching upon controversies regarding the status of the principle, this research will suggest different paths to apply the principle as a soft law instrument, capable of guiding the interpretation of treaty provisions. Most importantly, by providing a benchmark through the elements of the precautionary principle, this research will suggest that the principle could function as a double-edged sword by suggesting an objective test, which is a set of questions that could inform the tribunals' decision.

*'Solutions come through asking the right questions, because the answers pre-exist. It is the question that we must define and discover. You do not invent the answer, you reveal the answer.'*

*Jonas Salk*

# 1 Introduction

## 1.1 Background: nature of the legal problem

The relationship between foreign investment and environmental protection<sup>1</sup> is complex and has a dual nature.<sup>2</sup> Foreign investment regime and environmental protection are compatible terms and therefore are not necessarily in conflict with each other.<sup>3</sup> They can even be mutually supportive which is central to the concept of sustainable development. In fact, environmental concerns have already been integrated into many international investment agreements, and the space devoted to environmental considerations has been significantly expanded since the mid 1990s.<sup>4</sup> However, the potential for conflicts to arise between the two should not be underestimated. It is, for instance, not clear what would happen with investments in environmentally-sensitive sectors, such as water distribution, waste treatment, chemical safety or energy production, if the host State's environmental regulations were to become more rigid during the investor's operations. The discussion regarding the potential tension between investment and the environment started when foreign investors began to dispute the measures adopted by host states for environmental purposes. In fact, this issue has been debated for the past two decades. Therefore, the legal debate arising from the interaction between foreign investment and environmental protection is not new, and has received well-deserved attention.<sup>5</sup>

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<sup>1</sup> In this thesis reference to the environment means the sum of substances and forces external to the organism in such a way that it affects the organism's existence. In relation to man, the environment constitutes of air, land, water, flora and fauna because these regulates the man's life. Environment is not only our immediate surrounding but also a variety of issues connected with human activity, productivity, basic living and its impact on natural resources such as land, water, atmosphere, forests, dams, habitat, health, energy resources, wildlife etc. Arvind Kumar, *A Textbook of Environmental Science* (New Delhi: APH Publishing Corporation, 2011), p. 1.

<sup>2</sup> See Jorge E. Vinuales, 'Foreign Investment and the Environment in International Law: An Ambiguous Relationship', *British Yearbook of International Law*, 80 (2010).

<sup>3</sup> See Magnus Jesko Langer and Jorge E. Vinuales, 'Managing Conflicts Between Environmental and Investment Norms in International Law', in *The Transformation of International Environmental Law*, ed. by Yann Kerbrat and Sandrine Maljean-Dubois (Paris, Pedone/Hart, 2011), pp. 171–93.

<sup>4</sup> Kathryn Gordon and Joachim Pohl, 'Environmental Concerns in International Investment Agreements: A Survey' (2011) *OECD Working Papers on International Investment*, No. 2011/1 ('OECD Report'), p. 8.

<sup>5</sup> For book-length treatments see Jorge E. Vinuales, *Foreign Investment and the Environment in International Law* (Cambridge: Cambridge University Press, 2012); *Harnessing Foreign Investment to Promote Environmental Protection Incentives and Safeguards*, ed. by Pierre-Marie Dupuy and Jorge E. Vinuales (USA: Cambridge University Press, 2013); Markus W. Gehring, Marie-Claire Cordonier Segger and Andrew Newcombe, *Sustainable Development in World Investment Law* (Alphen aan den Rijn, The Netherlands: Frederick, MD: Kluwer Law International, 2010); Saverio Di Benedetto, *International Investment Law and the Environment* (Edward Elgar Publishing, 2013); Kate Miles, *The Origins of International Investment Law: Empire, Environment and the Safeguarding of Capital* (Cambridge University Press, 2015); Kyla Tienhaara, *The Expropriation of Environmental Governance: Protecting Foreign Investors at the Expense of Public Policy*, 1st edn (Cambridge University Press, 2009). There are, in addition, many articles and chapters.

Moreover, as a result of increased awareness of environmental concerns in the last few decades, there has been a shift from resource-inefficient and polluting socio-economic business models to those with lower environmental footprints; this has been taking an increasingly recognizable shape. This shift, above all, requires significant regulatory change to enable sufficient supervision and control over potentially harmful activities. Unfortunately, this cannot always be achieved without affecting economic operators.<sup>6</sup> This research focuses on these adverse impacts on the operation of foreign investors, which can lead to an investor-state dispute under the so-called international investment regime.

The investment protection regime was established to guarantee the investment of foreign investors in the receiving country. Although, each investment treaty creates a formally autonomous regime and vastly fragmented, scholars are increasingly referring to international investment law as a unified concept or a true legal regime.<sup>7</sup> Advocates of this approach depend on the similar features that most of the treaties share and also the fact that arbitrators tend to interpret investment treaties in similar was.<sup>8</sup> Moreover, interpretation of those common features and principle has established a ‘jurisprudence constante’, which supports the role of the investment treaties as a universal law on investment, which is evolving as a regime.<sup>9</sup> some even have argued that the treaty rules and interpretation have become customary international law and hence constitute as part of global regime.<sup>10</sup>

Investment treaties, including Bilateral Investment Treaties (BITs) and Free Trade Agreements (FTAs), were brought to developing countries as ‘tools that promote investment flows’. They were not intended as legal instruments solely designed to guarantee the protection of investments from the other treaty party.<sup>11</sup> As a matter of

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<sup>6</sup> Jorge E. Vinuales, ‘Foreign Investment and the Environment in International Law: The Current State of Play’, in *Research Handbook on Environment and Investment Law*, Kate Miles (Cheltenham: Edward Elgar, 2016), Chapter 2.

<sup>7</sup> Saverio Di Benedetto, *International Investment Law and the Environment* (Edward Elgar Publishing, 2013), p. 10.

<sup>8</sup> Id.

<sup>9</sup> Muthucumaraswamy Sornarajah, ‘The Case Against A Regime on International Investment Law’, in *Regionalism in International Investment Law*, ed. by Leon Trakman and Nicola Ranieri (Oxford University Press, 2013), p. 486. There are also other justifications to support the argument for considering the evolution of foreign investment as a regime; the need for good governance of standard of treatment requires globally uniform rules on foreign investment, the rule of law requires stability of norms of investment protection justifying the evolution of a regime of foreign investment protection and also that international investment law is a part of global administrative law.

<sup>10</sup> Id.

<sup>11</sup> Mahnaz Malik, ‘South-South Bilateral Investment Treaties: The Same Old Story?’, *International Institute for Sustainable Development*, 2011, p. 2 <<http://www.iisd.org/publications/pub.aspx?id=1425>>.

fact, BITs are one of the most popular policy initiatives undertaken by low and middle-income countries in the race to attract a larger share of global foreign direct investment.<sup>12</sup> Investment treaties are primarily concerned with attracting foreign investment by offering substantive protection to foreign investors. Namely, they guarantee a fair and equitable treatment (FET) for the covered investment, a commitment to pay compensation in the case of expropriation, the full protection and security and the prohibition of unreasonable or discriminatory measures.<sup>13</sup> Tied to these obligations is the right of individual investors to initiate an international arbitration proceeding against the host state; this can be triggered if the investor is of the view that one of the obligations has been breached. The incorporation of the investor-state dispute resolution mechanism distinguishes BITs from domestic policy instruments, and makes them a potentially effective obligation device.<sup>14</sup>

On the other hand, environmental considerations are playing a growing role within the field of investment law by being referenced in investment treaties. There are different categories of environmental provisions in investment agreements. Although these references do not always carry the same weight, they demonstrate the fact that players in the investment regime are increasingly taking into account the importance of environmental protection. The clauses vary in their position in the instrument and also in the message that they convey, such as: being only a general language in the preamble establishing concerns over the environmental protection in the document<sup>15</sup>, reserving policy space for environmental regulation, discouraging the loosening of environmental regulation to attract investment, clarifying that environmental regulation does not

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<sup>12</sup> *Id.*

<sup>13</sup> Kenneth J. Vandeveld, *Bilateral Investment Treaties: History, Policy and Interpretation* (Oxford University Press, 2010), p. 57.

<sup>14</sup> Emma Aisbett, *Bilateral Investment Treaties and Foreign Direct Investment: Correlation versus Causation*, Munich Personal RePEc Archive, 2007, p. 2. <<http://mpira.ub.uni-muenchen.de/2255/>>.

<sup>15</sup> For instance the US Model BIT 2004 states “Desiring to achieve these objectives in a manner consistent with the protection of health, safety, and the environment, and the promotion of internationally recognized labor rights”; the Australia-Chile FTA states the following: “Implement this Agreement in a manner consistent with sustainable development and environmental protection and conservation”; The NAFTA preamble states: “Undertake each of the preceding in a manner consistent with environmental protection and conservation; ... strengthen the development and enforcement of environmental regulation”; The Energy Charter Treaty also refers to environmental concerns more extensively and explicitly. It also lists multilateral environmental agreements: “Recognizing the necessity for the most efficient exploration, production, conversion, storage, transport, distribution and use of energy...Recalling the United Nations Framework Convention on Climate Change, the Convention on Long-Range Transboundary Air Pollution and its protocols, and other international environmental agreements with energy-related aspects...and Recognizing the increasingly urgent need for measures to protect the environment, including the decommissioning of energy installations and waste disposal, and for internationally-agreed objectives and criteria for these purposes”.

constitute indirect expropriation or encouraging the strengthening of the environmental regulation and cooperation.<sup>16</sup>

Overall, the fact that investment treaties are becoming more sensitive to environmental protection, together with the growing reference to these considerations in the treaties by investors and host states, indicate that environmental concerns are playing a growing role within the realm of investment law.<sup>17</sup> However, the inclusion of broad provisions to mention environmental considerations is not sufficient. By itself this cannot contribute to the achievement of sustainable development objectives unless governments become mindful of the need to provide appropriate interpretative guidance for the investment tribunals, who are charged with applying those provisions in the treaties.<sup>18</sup>

Additionally, investment protection provisions have the potential to interact with the non-investment obligations of the states. The tension between a state's environmental obligation and its investment obligation is one of the diverse types of tensions that may arise in this particular branch of international law.<sup>19</sup> The areas of state practice that have been overlapped by their investment obligations are human rights, environment protection and labour. In particular, when it comes to environment-related measures, among the investment protection provisions existing in most of the BITs, foreign investors have mostly invoked the FET provision and expropriation.<sup>20</sup>

Another important investment protection that is included in most modern BITs is non-discrimination which itself is composed of most favoured nations and national treatment.<sup>21</sup> This provision requires signatory states to provide foreign investors and their investment with treatment that is not less favourable than they accord to their own investors in like circumstances. With respect to the subject matter of this thesis, non-discrimination could become relevant where an investor claims that a similar activity by another investor was not targeted by the host state for environment-related measure.

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<sup>16</sup> Kathryn Gordon and Joachim Pohl, 'Environmental Concerns in International Investment Agreements: A Survey', OECD Publishing, *OECD Working Papers on International Investment*, 2011/01, 2011, p. 11 <<http://dx.doi.org/10.1787/5kg9mq7scrjh-en>>; see also Jorge E. Vinuales, *Foreign Investment and the Environment in International Law* (Cambridge: Cambridge University Press, 2012), p. 16.

<sup>17</sup> Vinuales, *Foreign Investment and the Environment in International Law*, p. 17.

<sup>18</sup> Kathryn Gordon and Joachim Pohl, 'Investment Treaty Law, Sustainable Development and Responsible Business Conduct: A Fact Finding Survey', OECD Publishing, *OECD Working Papers on International Investment*, 2014/01, 2014, p. 6 <<http://dx.doi.org/http://dx.doi.org/10.1787/5jz0xvgx1zlt-en>>.

<sup>19</sup> Magnus Jesko Langer and Jorge E. Vinuales, 'Managing Conflicts Between Environmental and Investment Norms in International Law', in *International Law Faced with Environmental Problems*, Y. Kerbrat and S. Maljean-Dubois (Oxford, Hart Publishing, Forthcoming, 2010).

<sup>20</sup> See Veijo Heiskanen, 'Unreasonable or Discriminatory Measures' as a Cause of Action Under the Energy Charter Treaty' (2007) 10 *International Arbitration Law Review*, p. 104.

<sup>21</sup> Di Benedetto, p. 15.

Therefore tribunal should assess whether those two investments are in fact in like circumstances. However, compared with the FET and expropriation this provision has been less referred to in environment-related cases and therefore in this research the focus would be more on FET and expropriation provisions. This is not to say that other provisions are irrelevant, but to sharpen the focus, the analysis in this research is confined to FET and indirect expropriation, as these are the most claimed provisions.

Inconsistency in the interpretation of investment provisions becomes more noticeable in environment-related investment disputes since the tribunals have taken different approaches towards environmental protection. This ‘scope for inconsistent decisions in regard to essentially the same issues’, which has been acknowledged among scholars and also by the Secretary General of ICSID, is obvious. Different tribunals under the same treaty can come to different conclusions regarding the same standard; the best example of this is the awards under the North American Free Trade Agreement (NAFTA), where tribunals have come to different conclusions about the meaning of the same standard.<sup>22</sup> Another scenario involves different tribunals that are established under different treaties but feature similar commercial situations and similar investment rights.<sup>23</sup> This inconsistency is partly due to the increasing number of investment treaties and broadly defined provisions. There are various issues in environment-related investment disputes that reflect inconsistencies in arbitral decisions.<sup>24</sup> As stated above, this study focuses on the area that has attracted the most attention and generated the most concern in this field, namely regulatory expropriation and FET.

## 1.2 *Expropriation*

Among different investment disciplines, protection against direct expropriation is a principal cause of action for investors, and is also the major motivating factor to establish the investment protection regime.<sup>25</sup> Therefore, the BITs universally include a provision that limits the states’ right to expropriate without compensation.<sup>26</sup> Customary international law does not prevent states from expropriating foreign investment if they fulfil its requirements, which are to achieve public purpose as provided by the law in a

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<sup>22</sup> For instance the definition of FET and legitimate expectation in *Metalclad v. Mexico* and *Methanex v. USA* and *Chemtura v. Canada*.

<sup>23</sup> Susan D. Franck, 2005, p. 1541. There is a third scenario in which different tribunal under different treaty but the same facts come to different conclusions. This happens for instance where investment is structured in a way to take advantage of more than one investment treaties.

<sup>24</sup> Compensation, national treatment, ....

<sup>25</sup> Tienhaara, *supra* note 5, p. 8.

<sup>26</sup> Vandevelde, *supra* note 14, p. 271.

non-discriminatory manner and upon payment of compensation.<sup>27</sup> However, the direct expropriation mainly related to nationalization, has been substituted by ‘indirect expropriation’, i.e. disputes over the regulations or measures adopted by the host states.<sup>28</sup> This was envisaged at the time to become the dominant issue in international investment law, which now appears to be true.<sup>29</sup> Therefore, concerns have turned to the possibility of drawing the line between non-compensable regulatory measures and other measures amounting to an indirect expropriation (and therefore require compensation).<sup>30</sup>

Technically, governmental measures could be justified under the sovereign right of the states to act for the public interest.<sup>31</sup> As Brownlie stated: ‘state measures, prima facie a lawful exercise of powers of governments, may affect foreign interests considerably without amounting to expropriation’<sup>32</sup>. This is also true when the measure is ‘necessary for its [states] recognized obligation’,<sup>33</sup> since it is regarded as ‘essential to the efficient functioning of the state’.<sup>34</sup> This element was also acknowledged by the *3rd restatement of foreign relation law of the US*, which recognized the ‘bona fide’ and ‘non discriminatory’ regulation adopted within the ‘police power’ as non-compensable.<sup>35</sup> Moreover, in the *Harvard Draft Convention* on the state responsibility, an uncompensated taking will not be regarded as wrongful if the measure was motivated to regulate ‘maintenance of public order, health or morality’.<sup>36</sup> In these circumstances, compensation cannot be required, since states ‘cannot be held responsible for economic consequences resulting from their

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<sup>27</sup>OECD, “Indirect Expropriation’ and the ‘Right to Regulate’ in International Investment Law”, in *OECD Working Papers on International Investment* (OECD Publishing., 2004) <<http://dx.doi.org/10.1787/780155872321>>.

<sup>28</sup> Id.

<sup>29</sup> Rudolf Dolzer, ‘Indirect Expropriations: New Developments Regulatory Expropriations in International Law: Colloquium Articles’, *New York University Environmental Law Journal*, 11 (2002), 64 (p. 64).

<sup>30</sup> Rudolf Dolzer and Christoph Schreuer, *Principles of International Investment Law* (New York: OUP Oxford, 2008), p. 93.

<sup>31</sup> *CME (The Netherlands) v. Czech Republic* (UNCITRAL), partial award, 13 September 2001. para 591, p. 166. Tribunal defined regulatory measures as aimed to “avoid use of private property contrary to the general welfare of the host State”.

<sup>32</sup> Ian Brownlie, *Principles of Public International Law*, 6 edition (Oxford ; New York: Oxford University Press, 2003), p. 509.

<sup>33</sup> George Christie, ‘What Constitutes a Taking of Property Under International Law?’, *Brit. Y.B. Int’l L.*, 38 (1962), 307–38.

<sup>34</sup> M. Sornarajah, *The International Law on Foreign Investment*, 2nd ed. (Cambridge University Press, 2010), p. 263.

<sup>35</sup> *Restatement of the Law, Third, Foreign Relations Law of the United States* (American Law Institute, 1987), vol I. Section 712, Comment g.

<sup>36</sup> Louis B. Sohn, *Harvard Draft Convention on the International Responsibility of States for Injuries to Aliens* (Harvard Law School, 1961), 10 (5).



adoption of general regulatory measures, taken in good faith, in the pursuit of a legitimate interest and in a non-discriminatory manner'.<sup>37</sup>

Some investment tribunals adopted the same approach to decide on disputed regulatory measures. For instance, the tribunal in *Feldman v. Mexico* excluded the qualified regulation from being compensated even if the investor's investment was adversely affected. The tribunal took the view that states must be:

Free to act in the broader public interest through protection of the environment...since, reasonable governmental regulation of this type cannot be achieved if any business that is adversely affected may seek compensation.<sup>38</sup>

Likewise, the tribunal in *Sedco v Iran* announced that the state is 'not liable for economic injury' having occurred as a result of 'bona fide regulation within the accepted police power of the state'.<sup>39</sup> Some tribunals have even taken one step further by considering the regulation as a consequence of the 'normal exercise of their regulatory powers.... in a bona fide ...non-discriminatory manner...that are aimed at the general welfare',<sup>40</sup> as part of the customary international law.<sup>41</sup>

These criteria correspond to the leading 'doctrines', but no consensus or coherence has been reached in the jurisprudential results. As the tribunal in *Pope & Talbot v. Canada* indicated, 'regulations can indeed be exercised in a way that would constitute creeping expropriation'. They specified that 'a *blanket exception* for regulatory measures would create a gaping loophole in international protections against expropriation'.<sup>42</sup> This would suggest that even if a tribunal is willing to recognize the state's exercise of police power, there is still no clear line between regulation and expropriation. As one commentator has suggested, the application of this 'indisputable' principle is anything but clear.<sup>43</sup> Police power cannot, by itself, be the benchmark to determine whether a measure is genuine or protectionist, particularly in those investment disputes where the

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<sup>37</sup> Brigitte Stern, 'In Search of the Frontiers of Indirect Expropriation', in *Contemporary Issues in International Arbitration and Mediation: The Fordham Papers 2007*, Arthur W. Rovine (Leiden: BRILL, 2008), pp. 45–46.

<sup>38</sup> *Feldman Karpa (CEMSA) v. United Mexican States*, ICSID Case No. ARB(AF)/99/1, Award of 16 December 2002, pp. 39–67 at 59.

<sup>39</sup> Iran-United States Claims Tribunal, *Sedco, Inc. v. National Iranian Oil Co.*, award n. ITL 59-129-3, 28 October 1985, Iran-United States Claims Tribunal Reports, Vol. 9, 1985, p. 275

<sup>40</sup> *Saluka Investments BV (The Netherlands) v. Czech Republic (UNCITRAL)*, partial award, 17 March 2006, para. 257.

<sup>41</sup> *Feldman Karpa (CEMSA) v. United Mexican States* Marvin Roy Feldman Karpa v. United Mexican States, ICSID Case No. ARB(AF)/99/1 (also known as Marvin Feldman v. Mexico); *Sedco v Iran*, supra 40.; *Saluka Investments BV (The Netherlands) v. Czech Republic*, supra 41.

<sup>42</sup> *Pope & Talbot Inc. v. Government of Canada*, (UNCITRAL/NAFTA), interim award, 26 June 2000, para. 96.

<sup>43</sup> Andrew Newcombe, 'The Boundaries of Regulatory Expropriation in International Law', *ICSID Review*, 20.1 (2005), 1–57.

environmental measures are being challenged by the investors. However, one should bear in mind that compared with other investment protection provisions, expropriation has a relative consistency in general based on the criteria that is developed by the case law. A more specific test, however, could bring more consistency to decision-making and to determine whether an environmental measure adopted by the host state is in breach of treaty provisions.

### *1.3 Fair and Equitable Treatment*

The next principle that investors have widely employed to challenge the measures taken by states is the FET standard. This standard is extremely vague, and to apply it some tribunals have had to review the ordinary meaning of ‘fair’ and ‘equitable’ to clarify the terms’ potential meaning.<sup>44</sup> FET does not have the same formulation in all of the BITs, which could clarify if the standard was intended to be an independent treaty language or as established customary international law concept.<sup>45</sup> For instance, some treaties refer to treatment ‘in accordance with principles of international law’,<sup>46</sup> while in some other treaties the clause expressly forbids certain types of state behaviours, such as ‘arbitrary’, ‘discriminatory’, or ‘unreasonable conduct’.<sup>47</sup>

The standard has its origin in the international minimum standard of treatment (MST), a customary international law regarding the treatment of aliens in general. Therefore, investment tribunals have traditionally looked into international law decisions addressing the MST for guidance. This was particularly true in the *Neer* case, which required the claimant to establish a high threshold of wrongfulness of the states.<sup>48</sup> However, some tribunals and scholars now treat the FET standard as a customary norm of international law, which has evolved autonomously from the MST.<sup>49</sup> Such a shift was

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<sup>44</sup> *MTD Equity Sdn. Bhd & MTD Chile S.A. v. Republic of Chile*, ICSID Case No. ARB/01/7, 86, May 25, 2004, “[i]n their ordinary meaning, the terms ‘fair’ and ‘equitable’ . . . mean ‘just’, ‘even-handed’, ‘unbiased’, ‘legitimate’”.

<sup>45</sup> Ioana Tudor, *The Fair and Equitable Treatment Standard in the International Law of Foreign Investment* (New York: OUP Oxford, 2008), p. 25; Rahim Moloo and Justin Jacinto, ‘Environmental and Health Regulation: Assessing Liability Under Investment Treaties’, *Berkeley Journal of International Law*, 29.1 (2011), p. 138.

<sup>46</sup> *Id.* p. 25.

<sup>47</sup> *Id.* p. 28

<sup>48</sup> *L.F.H. Neer and Pauline Neer v. United Mexican States*, 1926, 3ILR, 213, 1926, at 4 (“[T]he treatment of an alien, in order to constitute an international delinquency, should amount to an outrage, to bad faith, to willful neglect of duty, or to an insufficiency of governmental action so far short of international standards that every reasonable and impartial man would readily recognize its insufficiency.”).

<sup>49</sup> See R. Dolzer & C. Schreuer, *Principles Of International Investment Law* 92-96 (2008); Mann, F. A. *British treaties for the promotion and protection of investments*, B.Y.I.L. vol. 52, 1981, p. 241, at 244; R. Dolzer & M. Stevens, *Bilateral Investment Treaties*, Brill, Leiden, 1995, p. 60.

predicted at the time to become an additional source of inconsistency in the future.<sup>50</sup> Tribunals have developed a number of vaguely defined sub-categories, or ‘components’ of the standard, rather than completely interpreting it<sup>51</sup>. Some aspects that are particularly pertinent to claims relating to environmental measures are legitimate expectation<sup>52</sup>, stability and predictability of the legal framework<sup>53</sup>, transparency<sup>54</sup> and reasonableness<sup>55</sup>.

In almost all environment-related investment cases, the claimant has included the FET claim. The following review of some of the more important cases demonstrates the tribunals’ attempts to interpret and apply the standard in the context of environmental regulation by the host states.

For instance, in *Metalclad v. Mexico*, the tribunal focused on the lack of ‘transparency’ and ‘predictability’ of the respondent’s conduct.<sup>56</sup> The tribunal also highlighted Mexico’s failure to ensure a predictable legal framework, and indicated that the investor was ‘entitled to rely on the representations of federal officials’<sup>57</sup> because it was ‘led to

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<sup>50</sup> Rahim Moloo and Justin M. Jacinto, ‘Standards of Review and Reviewing Standards: Public Interest Regulation in International Investment Law’, in *Yearbook of International Investment Law and Policy*, ed. by Karl P. Sauvant (Oxford: Oxford University Press, 2012), p. 140.

<sup>51</sup> See, e.g., *Bivater Gauff Ltd v. United Republic of Tanzania*, ICSID Case No. ARB/05/22, Award, (July 24, 2008), para. 602. (explaining that the standard “comprises a number of different components, which have been elaborated and developed in previous arbitrations in response to specific fact situations”); *Bayindir Insaat Turizm Ticaret Ve Sanayi AS v. Pakistan*, ICSID Case No. ARB/03/29, Award, (Aug. 27, 2009), para. 178. (“The Tribunal agrees with Bayindir when it identifies the different factors which emerge from decisions of investment tribunals as forming part of the FET standard.”).

<sup>52</sup> *Bivater Gauff Ltd v. Tanzania*, supra 51. para. 602, (“the purpose of the [FET] standard is to provide to international investments treatment that does not affect **the basic expectations** that were taken into account by the foreign investor to make the investment, as long as these expectations are reasonable and legitimate and have been relied upon by the investor to make the investment.”)(emphasis added).

<sup>53</sup> *Occidental Exploration and Production Company v. Ecuador*, LCIA, UN3467, Final Award, (July 1, 2004), para. 183. (According to the *Occidental* tribunal, “[t]he **stability of the legal and business framework** is . . . an essential element of fair and equitable treatment.”)(emphasis added).

<sup>54</sup> *Metalclad Corp. v. the United Mexican States*, NAFTA, ICSID Case No. ARB(AF)/97/1, Award, (Aug. 30, 2000), para. 76. (“all relevant legal requirements for the purpose of initiating, completing and successfully operating investments made, or intended to be made, under the Agreement should be capable of being readily known to all affected investors of another Party.”)

<sup>55</sup> See *Glamis Gold, Ltd. v. the United States of America*, NAFTA/UNCITRAL, (June 8, 2009), para. 24. (In the award the reasonableness has been defined as “manifestly without reasons.”)

<sup>56</sup> *Metalclad Award*, supra 55., Investor’s Memorial (Oct. 13, 1997), paras. 162-65, available at <http://www.naftaclaims.com>. Para. 76 (“The Tribunal understands this to include the idea that all relevant legal requirements for the purpose of initiating, completing and successfully operating investments made, or intended to be made, under the Agreement should be *capable of being readily known* to all affected investors of another Party. There should be no room for doubt or uncertainty on such matters.”).

<sup>56</sup> Id. Para. 89

<sup>57</sup> Id. Para. 89

believe, and did believe, that the federal and state permits allowed for the construction and operation of the landfill.<sup>58</sup>

In *SDMI v. Canada*, although the tribunal asserted the importance of the regulatory choices of the state, it found in favour of the investor.<sup>59</sup> Claimant argued that Canada's export ban on a toxic chemical waste<sup>60</sup> violated the FET because it was 'arbitrary' and 'discriminatory',<sup>61</sup> 'procedurally unfair',<sup>62</sup> and a 'deliberate and domestically unlawful attempt to cause injury [which] violated the obligation of good faith.'<sup>63</sup> The tribunal concluded that having a protectionist intention in implementing the measure is sufficient to establish a breach of the FET<sup>64</sup>, and deemed it unnecessary to review other arguments relating to the provision.<sup>65</sup> The tribunal, therefore, was satisfied that the claimant had proven a sufficient degree of discriminatory intent by showing that Canada's policy was 'intended primarily to protect the Canadian chemical waste disposal industry from US competition.'<sup>66</sup> One commentator has called this approach problematic, which raises the question of how to deal with compound governmental motives.<sup>67</sup> Nevertheless, the tribunal did not dispute the legitimacy of the regulation but stated that the environmental concerns over chemical waste export were not scientifically justified.<sup>68</sup>

In *Tecmed v. Mexico*, the claimant argued that the FET standard was violated by the Mexican government, which managed the renewal of the landfill permit in a non-transparent and inconsistent manner.<sup>69</sup> The tribunal's decision in this part is notable, since it considered a higher threshold of conduct for the states by the way it included transparency and legitimate expectation as the components of the FET standard. The

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<sup>58</sup> *Id.* Para. 85.

<sup>59</sup> *S.D. Myers, Inc. v. Government of Canada*, NAFTA/UNCITRAL, Memorial on the Merits, (July 20, 1999), pt. II, sec. I, para. 140.

<sup>60</sup> Polychlorinated biphenyl is a synthetic organic chemical that was banned for its toxicity and classification as a persistent organic pollutant

<sup>61</sup> *S.D. Myers, Inc. v. Government of Canada*, supra<sup>60</sup>, Memorial on the Merits, pt. II, sec. I, para. 140

<sup>62</sup> *Id.* pt. II, sec. I, para. 141.

<sup>63</sup> *Id.* pt. II, sec. I, para. 142.

<sup>64</sup> *S.D. Myers, Inc. v. Government of Canada* award, para. 265

<sup>65</sup> *S.D. Myers, Inc. v. Government of Canada* award, para. 268

<sup>66</sup> *Id.* Para. 194 (emphasis added)

<sup>67</sup> Marcos A. Orellana, 'Science, Risk and Uncertainty: Public Health Measures and Investment Disciplines', in *New Aspects of International Investment Law*, Thomas Wälde, Philippe Kahn (Martinus Nijhoff Publishers, 2007), p. 789.

<sup>68</sup> See *S.D. Myers v. Canada*. Para. 176 (highlighting a contemporaneous government memorandum which found that an interim order to ban PCB exports "is not a viable option because it cannot be demonstrated that closing the border is required to deal with a significant danger to the environment or to human health")

<sup>69</sup> *Técnicas Medioambientales Tecmed S.A. v. United Mexican States*, ICSID Case No. ARB(AF)/00/2, (May 29, 2003).

tribunal described the transparency component of the standard in particularly robust terms:

The foreign investor expects the host State to act in a consistent manner, free from ambiguity and totally transparently in its relations with the foreign investor, so that it may know beforehand any and all rules and regulations that will govern its investments, as well as the goals of the relevant policies and administrative practices or directives, to be able to plan its investment and comply with such regulations.<sup>70</sup>

Despite being criticized for holding the state to an unrealistically high standard<sup>71</sup>, the award was cited by subsequent tribunals.<sup>72</sup> Moreover, with regard to the legitimate expectation, the tribunal notably established an interpretation for FET by assenting that an inappropriate purpose for the regulation could be regarded as a violation of the standard:

The fair expectations of the Claimant were that the Mexican laws applicable to such investment, as well as the supervision, control, prevention and punitive powers granted to the authorities in charge of managing such system, would be used for the purpose of assuring compliance with environmental protection, human health and ecological balance goals underlying such laws.<sup>73</sup>

The tribunal concluded that the purpose of the regulation was not to preserve the environment but rather to overcome the ‘social and political difficulties’<sup>74</sup> that were raised by the local group opposing the landfill.

In *Methanex v. USA*, the investor claimed that the MTBE<sup>75</sup> ban was intentionally discriminatory.<sup>76</sup> The tribunal rejected the claim by confirming that article 1105 NAFTA was not intended to include a non-discrimination norm.<sup>77</sup> It also accepted that the University of California Report (UC Report) ‘reflected a serious, objective and scientific approach to a complex problem in California’.<sup>78</sup> This shows that the tribunal was willing to consider the purpose of the regulatory response.

In *Glamis Gold, Ltd. v. the USA* the investor argued that the initial denial of the project violated its reasonable expectation, and that the overall delay in the project review was unreasonable. The tribunal rejected the claim by concluding that ‘to violate the

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<sup>70</sup> Id. 154

<sup>71</sup> Zachary Douglas, ‘Nothing If Not Critical for Investment Treaty Arbitration: Occidental, Eureko and Methanex’, *Arbitration International*, 22.1 (2006), 27–52 (p. 28).

<sup>72</sup> See, e.g., MTD Award, supra 44, para. 114.

<sup>73</sup> *TECMED Award*, supra 69, para. 157. (Emphasis added)

<sup>74</sup> Id. 163.

<sup>75</sup> Methyl Tert-Butyl Ether (MTBE) is a gasoline additive used as an oxygenate and to raise the octane number. Its use has declined in the in response to environmental and health concerns.

<sup>76</sup> *Methanex v. United States of America*, NAFTA/UNCITRAL, Award, (Aug. 9, 2005), para. 6.

<sup>77</sup> *Methanex award*, Pt.IV, ch. C, para 14-16.

<sup>78</sup> Id. Pt III, Ch. A, para. 101.

customary international law minimum standard of treatment codified in article 1105 of the NAFTA, an act must be sufficiently ‘egregious’ and ‘shocking’, a ‘gross denial of justice’, ‘manifest arbitrariness’, a ‘complete lack of due process’, ‘evident discrimination’, or a ‘manifest lack of reasons’- so as to fall below accepted international standards.<sup>79</sup> The case is remarkable for stating that the claimant must establish a high level of wrongfulness for the state’s conduct to constitute a breach of the FET standard. The same approach was taken by the *Chemtura* tribunal, who rejected the investors claim on the breach of FET standard by constituting the measure as a ‘valid exercise of the police power’.<sup>80</sup>

Similar to the tribunals’ approach with respect to regulatory expropriation, there is no coherence as to what constitutes a violation of fair and equitable treatment. Tribunals seem to have taken polarized approaches. This, as a result, leaves the states without clarity when deciding whether a measure to protect the environment might be regarded as a violation, or instead would be legitimately expected by the investor and therefore not in breach of FET.

There are cases in which tribunals have rejected the claim for expropriation, according to the police power of the host states to take action for its public interest. However, there is no objective and well-defined method that can be applied by subsequent tribunals or by the host state to identify what constitutes public interest. This matter is highly case sensitive, and tribunals have so far granted deference to allow the states to make decisions without having to pay compensation. According to Douglas, where the provisions do not provide an answer to the questions arising from investment treaties, tribunals should not refer to the abstract policies such as ‘promotion of foreign investment or respect for sovereign authority’, but rather allow fairness and justice to inform their interpretation.<sup>81</sup> This is due to the fact that:

The notion that investment treaty obligations should be interpreted restrictively in deference to the sovereignty of the state party has long been discredited. And rightly so. Equally fallacious, however, is the notion that has come to replace it; i.e., that investment treaty obligations should be interpreted broadly so as to assist in the promotion of foreign investment.<sup>82</sup>

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<sup>79</sup> *Glamis Gold, Ltd. v. the United States of America*, supra 56, para. 22.

<sup>80</sup> *Chemtura Corp. v. Canada*, NAFTA/UNCITRAL, (Aug. 2, 2010), paras. 92-96

<sup>81</sup> Zachary Douglas, ‘Nothing If Not Critical for Investment Treaty Arbitration: Occidental, Eureko and Methanex’, supra 77, p. 51.

<sup>82</sup> *Id.*

This issue would become problematic for the purposes of consistency and predictability. Also, if every action by the host state to protect the environment is regarded an act in the public's interest, then economic development would be completely stopped. This is not consistent with the objectives of sustainable development, in which all elements should work in an integrated manner instead of one becoming the focus and the other being undermined. Thus, it is of crucial importance for the tribunals to balance the interests of both parties of the investment agreement by the appropriate interpretation of its provisions.

This chapter of the thesis introduces the nature of, and legal background to, the relationship between investment law and environmental law. It also explains how the latter has been considered by investment tribunals when deciding if investment obligations have been breached. This chapter then identifies the research problems, which comprise one main research question together with two subsidiary ones. Furthermore, it explains the justification for this research, the analytical framework, the methodology and the expected contribution of the research.

#### *1.4 Significance of the problem*

With respect to environment-related investment decisions, it appeared that tribunals in many cases attempted to protect foreign investors' rights, while also recognising the right to protect the environment. As a result, they rejected the claim for expropriation and violation of FET. However, some other tribunals acknowledged the state's right to take environmental measures and the importance of environmental protection, yet disregarded these motives while interpreting the investment treaties. Simply put, they admitted that environmental protection is important, but when a measure that is intended for protection causes economic damages to the investors, environmental concerns become inferior and states either have to compensate for the actions taken or invoke their decision. Tribunals have not been consistent in their approaches in this regard and also have not supplied precise reasons to support their decisions.

The central issue is that to overcome this tension, something more than mere praise of environmental protection is required. It is argued that environmental issues have such a global and prevalent impact that they should not be regarded as a 'branch' of law but rather a 'perspective' that should be taken into account in every aspect of decision-

making.<sup>83</sup> Therefore, tribunals who acknowledge the significance of environmental protection should go further by understanding its peculiarities while looking at the states' behaviour against investors. The goal of this study is not to argue that tribunals should allow any measure that states adopt to protect the environment no matter what. Instead, the study intends to find a way to anchor dispute settlement in objective criteria. This way, not all environmental measures allow the host state to violate its obligations under investment treaties. Additionally, not all of the damages that are imposed on the investors, as a result of an environmental measure, are considered as a breach. A debatable question arising from this tension is how investment tribunals could, objectively, take into account environmental considerations while interpreting investment provisions. The significance of this problem regarding environment-related investment disputes is twofold: first, the inconsistency of the tribunals' decision and second, the peculiarities of environmental issues.

#### 1.4.1 Inconsistency

The brief study of environment-investment cases demonstrates that there is inconsistency and incoherence in case law with regard to the interpretation of the fundamental investment provisions.<sup>84</sup> The principles that are evolving from the investment tribunals' jurisprudence do not create comprehensive criteria to clarify the relationship between protection of foreign investment and environmental considerations. The scattered treatment from the tribunals regarding this issue may prevent states from making accurate assessments of the outcomes of attempts to protect the environment.<sup>85</sup>

There is a heated debate among scholars over whether the investor-state dispute settlement system is undergoing a legitimacy crisis. Some stakeholders have even shown their dissatisfaction either by denouncing the system or by amending their BITs to exclude this mechanism.<sup>86</sup> The bottom-line is that there are 'legitimate areas for

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<sup>83</sup> Pierre-Marie Dupuy, 'International Environmental Law: Looking at the Past to Shape the Future', in *Harnessing Foreign Investment to Promote Environmental Protection Incentives and Safeguards*, ed. by Pierre-Marie Dupuy and Jorge E. Viñuales (USA: Cambridge University Press, 2013), pp. 9–24 (p. 8).

<sup>84</sup> Examples of such cases were dealt with in Chapter two.

<sup>85</sup> See Susan D. Franck, 'Empirically Evaluating Claims about Investment Treaty Arbitration', *North Carolina Law Review*, 86 (2007), 1 (p. 49). Susan D. Franck.

<sup>86</sup> Devashish Krishan, 'Thinking About BITs And BIT Arbitration: The Legitimacy Crisis That Never Was', in *New Directions in International Economic Law: In Memoriam Thomas Wälde*, ed. by Todd Weiler and Freya Baetens (Martinus Nijhoff Publishers, 2011).



meaningful debate’.<sup>87</sup> One of the factors responsible for this alleged legitimacy crisis is the inconsistency and lack of predictability of the system.<sup>88</sup> It might be fair and true to argue that some level of inconsistency should be tolerated<sup>89</sup> and is common to every legal system in the quest for order and certainty.<sup>90</sup> However, the scale of unpredictability, especially in the field of the environment, could produce adverse consequences, such as discouraging states from responding to their environmental concerns.

Several tools have been discussed by the commentators to overcome this predicament, which include drafting a multilateral treaty and, as Schill calls it, ‘Multilateralization’<sup>91</sup>, establishing an appellate body, increasing transparency or even promoting a public law approach to the investment dispute settlement mechanism.<sup>92</sup> Nonetheless, referring to the efforts that have been made through the years to achieve a consensus, the idea of a universal treaty proves to be a long-term, if not unattainable, goal. Also, the idea of appellate body has raised controversy for the potential of adding to the politicization of the system and also increasing the costs.<sup>93</sup>

Another important method to alleviate the tension between environmental protection and investment protection is the use of general exceptions based on WTO Model

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<sup>87</sup> International Law Experts Response to Alliance for Justice ISDS Letter (April 2015): “We respectfully submit that there are legitimate areas for meaningful debate about the substantive rights provided in investment treaties. Having provided those rights, however, it is critical to offer a rule of law adjudicative mechanism—one that is perceived to be fair and creates enforceable outcomes—to provide a remedy that identifies when rights are breached and clarifies when state conduct is legitimate.” Available at: < <https://www.mcgill.ca/fortier-chair/isds-open-letter> >.

<sup>88</sup> OECD Secretariat for public consultation, *Investor-State Dispute Settlement Public Consultation: 16 May - 9 July 2012* (Paris, France: OECD Publishing, 2012) “However inconsistency should not be confused with uniformity as to the differing players and wording of the instruments. Therefore it is suggested to uses predictability instead of consistency to avoid misinterpretation.”

<sup>89</sup> Id.

<sup>90</sup> Stephan W Schill, ‘General Principles of Law and International Investment Law’, in *International Investment Law: The Sources of Rights and Obligations*, ed. by Tarcisio Gazzini and Eric De Brabandere (Martinus Nijhoff, 2012), pp. 133–81 (p. 139).

<sup>91</sup> See Stephan W. Schill, *The Multilateralization of International Investment Law*, 1 edition (Cambridge, UK ; New York: Cambridge University Press, 2009).

<sup>92</sup> See Van Harten, *Investment Treaty Arbitration and Public Law* (Oxford University Press, USA, 2008); Caroline E. Foster, ‘A New Stratosphere? Investment Treaty Arbitration as “Internationalized Public Law”’, *International & Comparative Law Quarterly*, 64.2 (2015), 461–85.

<sup>93</sup> Yannaca-Small Katia, ‘Improving the System of Investor-State Dispute Settlement’, *OECD Publishing*, OECD Working Papers on International Investment, 2006/01, 2006 <[http://www.oecd.org/china/WP-2006\\_1.pdf](http://www.oecd.org/china/WP-2006_1.pdf)>; OECD Secretariat for public consultation, supra 88 , p. 59.; August Reinisch, ‘The Issues Raised by Parallel Proceedings and Possible Solutions’, in *The Backlash Against Investment Arbitration. Perceptions and Reality*, ed. by Waibel, Nigel Blackaby, and Gabriel Bottini (Austin, Tex. : Alphen aan den Rijn, The Netherlands : Kluwer Law International ; Frederick, MD: Kluwer Law International, 2010), pp. 113–26 (p. 118): “since the introduction of an appellate system would have probably required an amendment of the ICSID Convention-hardly feasible as a matter of practice- the plan was not further pursued”.

according to the GATT Art. XX. This article allows member state to maintain some rights that would otherwise be affected by the strict trade obligations. Under the framework of general exception and as developed under WTO case law, member states have the right to maintain their own level of environmental protection provided that they are necessary for the desired level of protection.<sup>94</sup> Although this method is of paramount importance in the integration of environmental concerns into investment treaties, it is a tool in the hand of treaty makers to include a closed list of exceptions in the subsequent investment treaties.

Nevertheless, an immediate and more pragmatic solution could be reached at the other side of the process, namely, the dispute settlement phase. The role of the dispute settlement in this system has proved to be influential, although it is also partly to blame for the inconsistency in the field. Investment tribunals have contributed, to a great extent, to what we have now in the investment regime by interpreting and developing the vague provisions of the investment treaties. Although the decisions have not been very consistent, the instrumental role of the tribunals in defining the framework for the investment regime has been incontestable. They have claimed to be a ‘fact of life’ in investment treaty law.<sup>95</sup> The question remains as to how the investment tribunals could curtail inconsistency, and how this matter relates to the present research.

Kingsbury and Schill suggested that investment tribunals contribute to ‘a body of global administrative law that guides state behaviour’.<sup>96</sup> If this is true, then it could be safe to argue that the function of investment tribunals is to increase the predictability of the regime by providing a platform where ‘the rules are applied in a cognitively reliable way through competent and impartial adjudication’.<sup>97</sup> In particular, states, as the primary users and litigants in every case, have actual interest in the consistent interpretation of investment law. As potential respondents, they need to judge their exposure in

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<sup>94</sup> Saverio Di Benedetto, *International Investment Law and the Environment* (Edward Elgar Publishing, 2013). The author has dedicated the entire book on the ways by which exceptional clauses can be the optimal method to overcome the tension between the right of the states to regulate the environment and the restrictive rules on investment protection.

<sup>95</sup> Federico Ortino, ‘Investment Treaties, Sustainable Development and Reasonableness Review: In Search of Greater Clarity and Coherence’, King’s College London Dickson Poon School of Law, *Legal Studies Research Paper*, Paper No. 2015-30, p. 1.

<sup>96</sup> Benedict Kingsbury & Stephan Schill, ‘Investor-State Arbitration as Governance: Fair and Equitable Treatment, Proportionality, and the Emerging Global Administrative Law’, Institute for International Law and Justice, NYU Law School, Working Paper 2009/6 (Global Administrative Law Series), p. 2, <http://www.iilj.org/publications/documents/2009-6.KingsburySchill.pdf>.

<sup>97</sup> Thomas Schultz and C. Dupont, ‘Investment Arbitration: Promoting the Rule of Law or Over-Empowering Investors? A Quantitative Empirical Study’, *European Journal Of International Law*, 25 (2014), p. 23.

formulating policies, as inconsistent rules make the review (and a proper cost-benefit analysis) of the measure to protect the environment difficult, if not discouraging. As a result, states have sought to renegotiate the treaties for further legal certainty.<sup>98</sup>

In general, making coherent normative commands will lead to consistency, and consequently will create predictability in the system and thus strengthen a legal regime.<sup>99</sup> The ideas of coherence, consistency and ultimately predictability are at the heart of the concept of the rule of law that, as one of the ‘least objectionable political ideals’, should govern any legal regime.<sup>100</sup> There is a very close relationship between these two as the way to promote, further or sustain predictability of a normative regime, and the rule of law by way of providing ‘dependable guideposts for self-directed actions’.<sup>101</sup> In Schultz’s words, ‘a normative regime has to be sufficiently predictable to deserve the label of law’. The advantage of the rule of law (and thus the predictability of a legal system) is that the addressees of that system ‘rationally predict the consequences of their action’, which is evidence of a morally positive effect.<sup>102</sup> In other words:

A settled rule is more likely to be a live factor in the practical reasoning of its addressees than an unsettled rule: if you know with greater certainty that you are an addressee and what the rule commands you to do, then the rule is likely to figure more prominently in your conscious or unconscious decision-making.<sup>103</sup>

In theory, the direct function of the tribunals is related to their consequential function. Direct function, from a black-letter lawyer point of view, requires the tribunals to settle the dispute before it and safeguard its decision against annulment, with the aim being to move the case along and maximize the satisfaction of the parties.<sup>104</sup> In the context of the investment regime and dispute settlement system, aiming for party satisfaction means ‘to impartially and competently apply the proper legal rules to the relevant facts, to take into consideration all the particulars of the case and to grant the parties appropriate due

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<sup>98</sup>OECD Secretariat for public consultation, supra 88. p. 58: ‘Consistency can also increase the cost-effectiveness of dispute settlement for parties to disputes and potential disputes. Where issues are open and the subject of conflicting rulings, cases are more expensive because more issues need to be briefed and more research done by both lawyers and arbitrators. Settlement negotiations are made more difficult by greater legal uncertainty.’

<sup>99</sup> Thomas Schultz, ‘Against Consistency in Investment Arbitration’, in *The Foundations of International Investment Law: Bringing Theory into Practice*, ed. by Zachary Douglas, Joost Pauwelyn, and Jorge E. Viñuales (Oxford University Press, 2014), pp. 257–96 (p. 271)

<sup>100</sup> *Id.*

<sup>101</sup> Lon Luvois Fuller, *The Morality of Law* (Yale University Press, 1964), p. 229.

<sup>102</sup> Schultz, supra 99, pp. 270–74

<sup>103</sup> *Id.* p. 269.

<sup>104</sup> *Id.*

process'.<sup>105</sup> In this sense, it is in the legitimate interest of the parties to receive the fairest possible decision. The second function of the tribunals/courts goes beyond the satisfaction of the parties, and takes into account the objective of having a particular dispute settlement mechanism. This function concerns the 'broader moral-political value of a given tribunal for society', and aims to answer the question of what is being achieved with the resolution of the dispute in hand.<sup>106</sup> This function is called the consequential function, as apposed to the direct function of the tribunals. This is the provision of justice 'whose purpose is not to maximize the ends of private parties, but to explicate and give force to the values embodied in authoritative texts [and] to interpret those values and to bring reality into accord with them'.<sup>107</sup> In other words, the final aim is to 'bring reality closer to chosen ideals'.<sup>108</sup> According to the consequential function, 'it is not about the parties doing their thing in the corner, oblivious to the rest of the world'.<sup>109</sup> Dispute resolution also exists to 'give concrete meaning and expression to the public values embodied in the law and to protect those values', and to 'apply and protect the norms of the community'.<sup>110</sup>

To summarize, the purpose and function of the tribunal is not only to settle the dispute between the parties, but also to go beyond the case and address the overarching objective of the dispute. This is not compulsory, but is expected. Thus, by preventing inconsistent decisions from arising, the predictability of the system can be improved.<sup>111</sup> To achieve this goal, mechanisms must be implemented to promote greater sensitivity to the environmental concerns. Otherwise, investment arbitration 'may fall prey to public pressure arising from a backlash'.<sup>112</sup> As Franck pointed out:

Given that issues of legitimacy cut to the heart of the utility of using arbitration, the literature must address the concerns underlying the legitimacy crisis in a meaningful way. Otherwise, conflicting awards based upon identical facts and/or identically worded

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<sup>105</sup> *Id.*

<sup>106</sup> David D. Caron, 'International Courts and Tribunals: Their Roles amidst a World of Courts', *ICSID Review*, 26.2 (2011), 1–13 (p. 1).

<sup>107</sup> Owen Fiss, 'Against Settlement', *Yale Law Journal*, 93 (1984), p. 1085.

<sup>108</sup> Schultz, *supra* 99, p. 268.

<sup>109</sup> *Id.*

<sup>110</sup> Owen Fiss, 'Second-Hand Justice?', *Connecticut Law Tribune*, 1986, p. 11.

<sup>111</sup> Franck, *supra* 23, p. 1625.

<sup>112</sup> José E. Alvarez and Kathryn Khamsi, 'The Argentine Crisis and Foreign Investors: A Glimpse into the Heart of the Investment Regime', in *The Effect of Treaties on Foreign Direct Investment Bilateral Investment Treaties, Double Taxation Treaties, and Investment Flows*, Karl P Sauvart and Lisa E Sachs (Oxford University Press, 2009), p. 399.

investment treaty provisions will be a threat to the international legal order and the continued existence of investment treaties<sup>113</sup>

#### 1.4.2 Unique Characteristics of the Environment

As elaborated in the first section, the need to protect the environment has been increasingly recognized in recent BITs.<sup>114</sup> Even so, despite moves to recognise a wider discretion for states in the new generation of BIT's, the interaction between investment law and environmental law remains a contentious relationship. On the other hand, the characteristics of environmental issues *per se* require a special focus. The irreversibility of harm and the uncertainty of risk are common characteristics of environmental issues, and are recognized in international and national environmental instruments.

Many environmental problems have an element of irreversibility. For instance, if a species is lost or if a pristine area is ruined, the damage is probably permanent. Also, toxic chemicals and substances might lead to irreversible ecological harm.<sup>115</sup> It is true that all losses are irreversible in the strictest sense, and the precise structure of the world cannot once again come into being.<sup>116</sup> Nevertheless, the concept of irreversibility is in the first place associated with the scale of time. As a matter of fact, 'we live in a finite planet, where the time is not a healer'.<sup>117</sup> Many long-term environmental damages are not *stricto sensu* irreversible, but are so unlikely to be undone that they may be considered virtually and practically irreversible,<sup>118</sup> or not reversible over a reasonable time.<sup>119</sup>

On the other hand, the current generation of environmental problems involve a high degree of scientific uncertainty.<sup>120</sup> The undeniable fact is that without science, there would be little public concern over the wide range of environmental issues.<sup>121</sup> They include, but not limited to, climate change, ozone depletion, biodiversity loss, acid rain

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<sup>113</sup> Franck, *supra* 87, p. 1583.

<sup>114</sup> *Supra* note 1.1.

<sup>115</sup> Cass R. Sunstein, 'Two Conceptions of Irreversible Environmental Harm', *University of Chicago, Public Law Working Paper No. 218*, 2008.

<sup>116</sup> Julian Morris, 'Defining the Precautionary Principle', in *Rethinking Risk and the Precautionary Principle*, Julian Morris (Oxford: Butterworth-Heinemann, 2000).

<sup>117</sup> Arie Trouwborst, *Precautionary Rights and Duties of States* (Netherlands: BRILL, 2006), p. 58.; see also: Tim Jackson, *Prosperity without Growth: Economics for a Finite Planet*, Reprint edition (London ; Washington, DC: Routledge, 2011); Donella H. Meadows, Jorgen Randers and Dennis L. Meadows, *The Limits to Growth: The 30-Year Update*, Revised edition (Routledge, 2004).

<sup>118</sup> Trouwborst, *Precautionary Rights and Duties of States*, *supra*, 119, p. 61.

<sup>119</sup> ASEAN Agreement on the Conservation of Nature and Natural Resources (ASEAN Agreement), article 4(1)(d).

<sup>120</sup> Daniel Bodansky, *Art and Craft of International Environmental Law* (USA: Harvard University Press, 2010), p. 32.

<sup>121</sup> Dale Jamieson, 'Scientific Uncertainty and the Political Process', *The ANNALS of the American Academy of Political and Social Science*, 545.1 (1996), 35–43 (p. 36).

and exposure to radon and various toxic chemicals. Nevertheless, despite its crucial role in addressing these problems, science has been relatively ineffective at providing solutions.<sup>122</sup> Uncertainty could be the consequence of different elements. As the European Commission comments in its Communication on the precautionary principle:

Scientific uncertainty results usually from five characteristics of the scientific method: the variable chosen, the measurements made, the samples drawn, the models used and the causal relationships employed. Scientific uncertainty may also arise from a controversy on existing data or lack of some relevant data. Uncertainty may relate to qualitative or quantitative elements of the analysis.<sup>123</sup>

A more convenient distinction is the one between epistemological (due to the lack of knowledge) and ontological (due complexity and variability) uncertainty.<sup>124</sup> While the first category includes the lack of techniques for measurement and analysis, limitation of available tools, etc.<sup>125</sup>, the second is caused by the quality of nature itself. By way of explanation, everything in nature is interrelated. The signatories to the *Rio Declaration* acknowledged the ‘integral and interdependent nature of the earth’<sup>126</sup> and the existence of the ‘earth ecosystem’.<sup>127</sup> This complexity affects human comprehension of the natural system, and the ability of science to predict it.<sup>128</sup> This type of uncertainty is not only caused by complexity of nature and the lack of knowledge, but also by nature’s innate variability. In fact, the elements of the natural world are mostly dynamic and unpredictable, rather than being regular and periodical.<sup>129</sup> Consequently, the combined forces of these elements prevent scientists from absolutely ensuring conclusive scientific evidence.

Moreover, threats to the environment are dynamic, and current concerns have never had the importance that they currently do. Recent well-known studies highlight that the global earth system is at a critical condition due to human activities.<sup>130</sup> Accordingly,

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<sup>122</sup> *Id.*

<sup>123</sup> The European Commission’s 2000 Communication COM(2000)1 on the Precautionary Principle (hereinafter COM(2000)1), p 14.

<sup>124</sup> Trouwborst, *supra*, 117. p. 74.

<sup>125</sup> Examples are, lack of global system monitoring land degradation and desertification, the lack of reasonably accurate global map of wetlands and the security. This type of uncertainty can be abolished by gathering more information or improving the models for analysis.

<sup>126</sup> *The Rio Declaration On Environment And Development*, The United Nations Conference on Environment and Development, Rio de Janeiro (1992), preamble.

<sup>127</sup> *Id.* principle 7.

<sup>128</sup> Trouwborst, *supra*, 119. p. 75

<sup>129</sup> *Id.* p. 78

<sup>130</sup> Stockholm Resilience Centre, The Planetary Boundaries project: The framework of the Planetary Boundaries was first introduced in 2009, when a group of 28 internationally renowned scientists identified and quantified the first set of nine planetary boundaries within which humanity can continue to develop and thrive for generations to come. Their argument is that crossing these boundaries could generate

suggestions have been made for governments to shift their policies from being reactive and minimizing externalities, to a more proactive approach towards environmental problems. This also entails the estimation of the safe space for human development.<sup>131</sup>

There are two main difficulties regarding the management of environmental issues, namely: the global nature of environmental concerns and the science-law relationship. Environmental concerns are by their very essence global, and reach beyond the territory of each state. They inevitably interact with other regulatory fields, which reflect the politically hard choices that must be made by states. These concerns have gained such magnitude that they must not be perceived as a branch of international law, but rather as a 'dimension' inherent to each specific human activity.<sup>132</sup> Ecology is by definition the 'science of interdependence' and international environmental law is 'no longer defined by the approximate laying out, or interaction, of state sovereignties on a planet that has become too small and cramped. More than a right of joint ownership, international environmental law has become the responsibility of the whole.'<sup>133</sup>

Another important factor in this field is the growing complexity of adjudicating environmental disputes. While scientific uncertainty is inherent in environmental issues, the usual perception of adjudication and the main concern is the proof of facts. This leads to the argument on inherent cultural differences between the scientific and legal worlds. Most environment-related claims are concerned with a measure that the host state had adopted to prevent a future risk to the environment. Not all of those concerns can be supported with conclusive scientific evidence. Facing these types of claims, in general, international tribunals/judges prefer to rely on an estimation of the actual damage, instead of depending on the assessment of future potential risks from the disputed activity.<sup>134</sup> Therefore, having a scientific approach to the assessment of the

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abrupt or irreversible environmental changes. Respecting the boundaries reduces the risks to human society of crossing these thresholds. The study was set out to define boundaries for the biophysical processes that determine the Earth's capacity for self-regulation. Namely, The concept highlights that dangerous thresholds on global earth-system processes have already been crossed or are being rapidly approached due to human activities. This study suggested that the approach of governance should be shifted from preventive and minimizing externalities to a more precautionary approach that is toward the estimation of the safe space for human development. According to the last updates, four of nine planetary boundaries have now been crossed as a result of human activity, says an international team of 18 researchers in the journal *Science* (16 January 2015). The four are: climate change, loss of biosphere integrity, land-system change, altered biogeochemical cycles (phosphorus and nitrogen). <<http://science.sciencemag.org/content/early/2015/01/14/science.1259855.full> > [accessed 07 February 2016].

<sup>131</sup> *Id.*

<sup>132</sup> Dupuy, *supra* 85. p. 15.

<sup>133</sup> *Id.* p. 13.

<sup>134</sup> *Id.* p. 16.

potential environmental risks, merely based on statistical methods and focusing on the actual occurrence of a quantified damage, is evidence of the sensitivity of the topic, and demonstrates the complexity of environment-related disputes.<sup>135</sup> Hence, uncertainties surrounding harm to the environment have frequently been used to push the protection of the environment lower on the priority list.<sup>136</sup> In Foster's words:

The challenge is for tribunals to make reasoned decisions that pay due attention to the harm that is threatened in every dispute, despite the absence of the perfect knowledge or conclusive scientific evidence.<sup>137</sup>

This section demonstrated the potential tension with regard to environment-related investment disputes. The significance of this problem for both investors and host states was explained to be the unpredictable investment regime and its impact on decision-making, regarding the pressing issue of global environmental protection. The initial motive for this research is to determine the extent to which investment tribunals give weight to the environmental concerns that trigger measures, which, as a result, impose economical damages on investors' activities.

The lens through which this question is approached is the precautionary principle. It is one of the crucial environmental law principles, and is highly relevant to most of the environment-related investment disputes. If the potential risk is serious, or if there is evidence that concerns about potential risks have been proven valid in factually similar situations, the precautionary principle suggests that regulation may be appropriate. This is due to the fact that the available science may not conclusively affirm or deny the presence of a risk that merits regulation. This crucial issue forms the main question of this research, together with two subsidiary questions, namely:

**How could investment tribunals, in deciding an environment-related investment dispute, objectively identify a violation of the investor's treaty rights, taking into account the host state's regulatory autonomy in environmental matters?**

- a. What criteria/benchmarks should/do tribunals use in deciding environment-related investment disputes in the absence of conclusive scientific evidence?

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<sup>135</sup> *Id.*

<sup>136</sup> Rebecca M. Bratspies, 'Trail Smelter's (semi) Precautionary Legacy', in *Transboundary Harm in International Law: Lessons from the Trail Smelter Arbitration*, Rebecca M. Bratspies & Russell A. Miller (Cambridge: Cambridge University Press, 2006), p. 153.

<sup>137</sup> Caroline E. Foster, *Science and the Precautionary Principle in International Courts and Tribunals: Expert Evidence, Burden of Proof and Finality* (New York: Cambridge University Press, 2011). Also in Dupuy, 2013, p. 14.



- b. What is the legal and functional justification for applying sources of international law, other than/outside of the BITs?

### 1.5 Objectives

Several methods and mechanisms have been proposed to overcome the potentially conflicting dimensions of the relationship between investment law and environmental law. They include methods such as limiting the scope of investment protection clauses, the role of non-disputing parties, the operation of emergency or necessity clauses<sup>138</sup>, the state's regulatory power<sup>139</sup>, recognition of responsibility for investors<sup>140</sup>, the possibility of states bringing a counter argument<sup>141</sup>, contractualization of environmental protection<sup>142</sup> and so on. Despite various proposals and emphasis related to the importance of environmental considerations, recent awards have proved that the outcome could still be unpredictable. In this context, the purpose of the present study is to build on the existing literature to assess the possibility of applying one particular principle of international environmental law, namely the precautionary principle. The goal is to provide a conceptual framework for its application, which will act as a tool to inform the interpretation of the investment provisions.

The main contention of this study is that the precautionary principle, as developed by international environmental law and as one of its leading principles, could provide a useful guide for interpretation of relevant investment provisions in an environment-related dispute. The principle is broadly understood as a tool for public authorities to intervene in advance, and thus prevent potential or uncertain threats of environmental harm. The cardinal point is that a lack of evidence of harm should not provide a basis for reaching the conclusion that there is no threat of harm. The principle is recognized

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<sup>138</sup> Jorge E. Viñuales, 'The Environmental Regulation of Foreign Investment Schemes under International Law', in *Harnessing Foreign Investment to Promote Environmental Protection Incentives and Safeguards*, ed. by Pierre-Marie Dupuy and Jorge E. Viñuales (USA: Cambridge University Press, 2013), pp. 273–320.

<sup>139</sup> *Id.*

<sup>140</sup> Elisa Morega, 'From Corporate Social Responsibility to Accountability Mechanisms', in *Harnessing Foreign Investment to Promote Environmental Protection Incentives and Safeguards*, ed. by Pierre-Marie Dupuy and Jorge E. Viñuales (USA: Cambridge University Press, 2013), p. 321; Benjamin J. Richardson, 'Socially Responsible Investing through Voluntary Codes', in *Harnessing Foreign Investment to Promote Environmental Protection Incentives and Safeguards*, ed. by Pierre-Marie Dupuy and Jorge E. Viñuales (USA: Cambridge University Press, 2013), p. 383.

<sup>141</sup> Zachary Douglas, 'The Enforcement of Environmental Norms in Investment Treaty Arbitration', in *Harnessing Foreign Investment to Promote Environmental Protection Incentives and Safeguards*, ed. by Pierre-Marie Dupuy and Jorge E. Viñuales (USA: Cambridge University Press, 2013), pp. 415–44.

<sup>142</sup> Natasha Affolder, 'Beyond Law as Tools: Foreign Investment Projects and the Contractualisation of Environmental Protection', in *Harnessing Foreign Investment to Promote Environmental Protection Incentives and Safeguards*, ed. by Pierre-Marie Dupuy and Jorge E. Viñuales (USA: Cambridge University Press, 2013), p. 355.

as a departure from the *primacy* of scientific proof, rather than a denial of the role of science. Interestingly, many of the disputed environmental measures in investment disputes fall under this category, as the states took action based on their concerns about the potential harm that a specific activity might impose on the environment.

### ***1.6 Justification***

The justification for this approach is twofold. First of all, the present controversial question, according to recent awards,<sup>143</sup> is less about whether environmental protection is important, but rather about how much it could influence the interpretation of the investment obligation and the detection of treaty violations. Hence, in this study, the inconsistency in dispute settlement is addressed from this point of view. In other words, the current dynamic of the investment-environment relationship requires a more practical evaluation. This should focus on to what extent investment tribunals should take into account the environmental consideration for its actual impact, and not only an abstract praise of its significance.

The second element of this study concerns environmental risks and their peculiarities. In brief, the irreversibility of the harm and the uncertainty of the risks are the common characteristics of environmental problems. Therefore, providing a conceptual framework for the application of the precautionary principle, which is the result of the futility of looking exclusively to science to justify environmental protection, is relevant and warranted. This will enable investment tribunals to take into account the current and future challenges facing the governments. For instance, recent environmental incidents caused by human, such as the catastrophic oil spills, the chemical and nuclear leak, biodiversity disasters and loss of many species, etc., have triggered new discourses among states to take further steps for supervision and control. Moreover, further research and findings have increased global awareness about certain products or future damages that might occur to the environment such as climate change. Most of the actions resulting from this awareness are based on available data, and not necessarily on conclusive science. Hence, the precautionary principle has become more significant in the field of environmental protection to allow action if the threat of serious harm is established. In the unsettled and fluctuating context of environmental law and regulation, it is crucial for states to be clear about which moves would expose them to a

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<sup>143</sup> For instance see Bilcon award and the tribunal's reasoning, *infra* 253.

breach of investment obligation. States also need to understand the costs of their actions to make informed manoeuvres.

Moreover, as the environmental concerns increase, states would become more active in providing solutions and mechanisms to alleviate those concerns in national and international level. These measures will mainly have anticipatory nature in order to identify potential threats and stop them. This means more scrutiny, more control, more supervision, more requirements form developers and so on. In fact there are many pending investment disputes in which, mostly these types of anticipatory measures have been questioned by foreign investors. For instance, in *Pac Rim v. El Salvador*, after a lengthy review, the government requested the claimant to conduct a water treatment plan.<sup>144</sup> Residents of Cabañas, where the mine is located, have already reported negative environmental impacts from the approximately 660 exploratory wells that Pac Rim has drilled in the region, ranging from reduced access to fresh water, polluted water, impacts to livestock and adverse health impacts.<sup>145</sup> What is more, the impact of full exploitation would be dramatic.<sup>146</sup> Moreover, in March 2008 the then president announced his disagreement with granting mining permits and the policy that the mining law should be revised.<sup>147</sup> While this statement does not mean that the government denied any of the company's applications, the claimant argues that the government cannot and "has no legal basis to do so" and prevent the company to continue its operation.<sup>148</sup> Another example is *Vattenfall v. Germany*, which is the second dispute by the same investor against the changes in environmental policies of the country.<sup>149</sup> Investor requested for arbitration against Germany at relying on its rights under the Energy Charter Treaty, seeking enormous damages relating to the country's new policy on the phasing out of nuclear power.<sup>150</sup> In a week after the Fukushima nuclear disaster in March 2011<sup>151</sup>, the federal government commissioned the Advisory Committee on Reactor Safeguards

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<sup>144</sup> *Pac Rim Cayman LLC v. Republic of El Salvador*, ICSID Case No. ARB/09/12, Apr 30, 2009.

<sup>145</sup> *Id.* Para. 9.

<sup>146</sup> *Id.*

<sup>147</sup> *Id.*

<sup>148</sup> *Id.* Para.81.

<sup>149</sup> *Vattenfall AB and others v. Federal Republic of Germany*, ICSID Case No. ARB/12/12, Notice of Arbitration, May 31, 2012. Document not publically available.

<sup>150</sup> *Vattenfall AB and others v. Federal Republic of Germany*, ICSID Case No. ARB/12/12, Notice of Arbitration, May 31, 2012. Document not publically available.

<sup>151</sup> Nuclear energy has a history of controversial public debate behind it. Before the 13<sup>th</sup> amendment in December 2010, Germany announced the "lifetime extension" decision in order to bring about a new era of energy policy. The lifetime extension allows the nuclear plants to extend their operation beyond their legal lifetime. The Government faced social majorities against this decision and as a result had to abate the decision a few months later.

(RSK) to conduct a comprehensive safety review of all the nuclear power plants in Germany.<sup>152</sup> The new Atomic Energy Act announced that permission for the operation of a nuclear power station expires at the latest on a legally specified date for each respective plant, which prevents the companies to request a lifetime extension.<sup>153</sup> The settlement of a previous case makes it difficult to speculate on the tribunal's decision since both disputes were based on the ECT, which has relatively stronger provisions for environmental protection. These are some instances in which a forward-looking approach by the government, which is hugely encouraged under international environmental law, could expose them to multi-billion investment disputes. Therefore, conducting this research would be necessary to address these issues and provide a solution that could address these concerns and at the same time ensure that the fears of future harm passes a certain test to be qualified as a trigger for action and defensible before investment tribunals.

Various scholars have addressed the topic of environmental concerns in investment dispute settlement and many suggestions have been put forward. Nevertheless, there is a gap in the literature on application of environmental principles, in particular, precautionary principle in a systematic way. By building on previous and valuable studies, the goal of this study is to go beyond theoretical justification for the importance of environmental concerns and provide a test for the investment tribunals to assess the environmental measures against the investment treaty provisions.

Hence, it is important for the tribunals to find a way to merge and integrate the need to protect the environment and the duty to protect foreign investors, using legal tools such as treaty interpretation, instead of addressing the issue as a conflicting interests that only one of them would prevail at the expense of the other.

## *1.7 Analytical Framework*

The main contention of this thesis is that the precautionary principle, as one of the leading principles developed by international environmental law, could provide a useful tool for analysing most environment-related investment disputes. While the preventive

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<sup>152</sup> H. Schneider , Residual Risks of the 13th Amendment to the German Atomic Energy Act. <[http://www.kernenergie.de/kernenergie-en/service/fachzeitschrift-atw/hefte-themen/2011/augsep/12\\_restrisiken-atomgesetzaenderung.php](http://www.kernenergie.de/kernenergie-en/service/fachzeitschrift-atw/hefte-themen/2011/augsep/12_restrisiken-atomgesetzaenderung.php)>.

<sup>153</sup> Nathalie Bernasconi-Osterwalder and Rhea Tamara Hoffmann (2012). The German Nuclear Phase-Out Put to the Test in International Investment Arbitration? Background to the new dispute Vattenfall v. Germany (II). Winnipeg, MB: IISD. Retrieved from <[http://www.iisd.org/pdf/2012/german\\_nuclear\\_phase\\_out.pdf](http://www.iisd.org/pdf/2012/german_nuclear_phase_out.pdf)>.

principle involves intervention prior to the occurrence of known risks, the precautionary principle is broadly understood as a tool for public authorities to intervene in advance and prevent potential or uncertain threats of environmental harm.<sup>154</sup> In other words, the preventive principle is concerned with the prevention of harm and risks which are known, scientifically proven and can be reasonably avoided, whereas the precautionary principle runs in advance of prevention (but is not completely separate from it).<sup>155</sup> The cardinal point is that a lack of evidence of harm should not provide a basis for reaching the conclusion that there is no threat of harm.<sup>156</sup> Thus, the precautionary principle is recognized as a departure from the 'primacy of scientific proof'.<sup>157</sup>

The principle emerged, about three decades ago, in the context of the marine pollution sector at the *North Sea Inter-ministerial Conference*.<sup>158</sup> This step marked the beginning of a swift development. It took less than five years for the principle to become practically universally accepted as one of the most important principles of international environmental law. Thus, its acceptance, which was sealed at the *1992 UN Conference on Environment and Development* in Rio de Janeiro, was considered to be an international breakthrough for the principle.<sup>159</sup>

It also has received a vast attention in the international arena. In the environmental field, there is practically no multilateral treaty or intergovernmental declaration from the last twenty years in which the principle is lacking. At present, the precautionary principle can be found in (or under) some 60 multilateral treaties, and has been applied to the whole gamut of environmental and natural resource exploitation issues. These range from migratory birds to persistent organic pollutants, and from fisheries and biodiversity conservation to climate change and the transport of hazardous wastes. The influence of the principle is well recognised at the EU level, where it is powerfully

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<sup>154</sup> Foster, *supra* 139, p. 18.

<sup>155</sup> David Freestone, 'International Fisheries Law since Rio: The Continued Rise of the Precautionary Principle', in *International Law and Sustainable Development: Past Achievements and Future Challenges*, ed. by Alan E. Boyle and David Freestone (Oxford University Press, 1999), p. 139.

<sup>156</sup> Elizabeth Fisher, 'Is the Precautionary Principle Justiciable?', *Journal of Environmental Law*, 13.3 (2001), 315–34 (p. 319); Jacqueline Peel, *The Precautionary Principle in Practice: Environmental Decision-Making and Scientific Uncertainty* (Federation Press, 2005), p. 48.

<sup>157</sup> See: Harald Hohmann, *Precautionary Legal Duties and Principles of Modern International Environmental Law: The Precautionary Principle: International Environmental Law Between Exploitation and Protection*, International Environmental Law and Policy Series (London: Graham & Trotman/Martinus Nijhoff; Kluwer Academic Publishers Group, 1994), pp. 334–335; Owen McIntyre and Thomas Mosedale, 'Precautionary Principle as a Norm of Customary International Law, The', *Journal of Environmental Law*, 9 (1997), 221 (p. 222); David Freestone and Ellen Hey, 'Origins and Development of Precautionary Principle', in *The Precautionary Principle and International Law: The Challenge of Implementation*, International Environmental Law and Policy Series (Netherlands: Kluwer Law International, 1996), pp. 3–15 (p. 13).

<sup>158</sup> Second International Conference On The Protection Of The North Sea (London Declaration) 1987.

<sup>159</sup> Rio Declaration, *supra* 128, Principle 15,

established as a binding principle in European law.<sup>160</sup> Notwithstanding the controversy regarding its legal status, it could be argued that the precautionary principle is a widely accepted principle amongst states, and has been used by several international courts and tribunals in adjudicating environment related disputes.<sup>161</sup> In this section, the definition, status and application of the principle are briefly discussed to set the analytical framework of this research. However, according to the peculiarities of the principle, and the central role that it plays in this research, the third chapter of the thesis is devoted to explore the principle in detail.

In attempt to answer the research questions, this study will develop an analytical framework based on the precautionary principle to provide a judicial guide for investment tribunals. This is particularly aimed at those disputes where the basis for the challenged environmental measure is to prevent a potential threat from materialising, and is therefore not necessarily anchored in conclusive scientific evidence. These disputes occur mostly because such measures are not adopted in a straightforward decision making process. As will be explained in the third chapter, though scientific studies can inform the decisions, they cannot prescribe solutions, as most of those decisions are choices that states make to decide their level of protection.

The following examples show the complexity of the concerns that result in environmental measures, and also demonstrate that science cannot be the only basis to justify the decisions made. In situations such as the fear of water contamination, authorities might deny a construction permit for a waste landfill facility,<sup>162</sup> or replace a permanent license with an annually renewable one, to closely monitor a hazardous waste landfill facility due to their history of soil or other contaminations<sup>163</sup>; In another instance, to ensure the safety of the production of the chemical products, authorities might ask the investor to conduct an Environmental Impact Assessment (EIA);<sup>164</sup> Due to the concerns over significant risks resulting from the chemical contamination of surface water and groundwater, a state might decide to regulate the chemical and phase

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<sup>160</sup> See. *The Treaty of Maastricht* (the Treaty on European Union) (1992) 31 *ILM* 247, article 130R.; *Treaty Of Amsterdam*, (998) 37 *ILM* 56 art 174(2); *Treaty Of Nice*, 2001 OJ (C80) 1; *The Lisbon Treaty*, 2007 OJ (C360) 1, art 191(2); Communication Of The Commission, 2 February 2000, On The Precautionary Principle, COM (2000)1 *supra* 123.

<sup>161</sup> Arie Trouwborst, 'The Precautionary Principle in General International Law: Combating the Babylonian Confusion', *RECIEL*, 16.2 (2007), 185–95 (p. 184).

<sup>162</sup> See *Metalclad award*, *supra* 55.

<sup>163</sup> See *TECMED award*, *supra* 70.

<sup>164</sup> See *Maffezzini award*, *infra* 281

it out from gasoline;<sup>165</sup> A protected zone might be created on a beach where female Leatherback Turtles lay their eggs in, to protect the endangered status of these animals and their nesting habitat;<sup>166</sup> Or a proposal for a parking project next to a historical venue may be rejected for historical preservation.<sup>167</sup>

These examples are only a few scenarios where the states' interference (to protect a potential environmental damage) was disputed. Almost every action by the state for the purpose of, or as a result of, monitoring environmental efficiency would impose some economic impact on the operators. Thus, every action is a potential investor-state dispute, if the activity belongs to a foreign investor. Moreover, although the subject matter of the disputes is vastly different, there is one common element in most of the environment-related investment disputes: the investor's activity poses a potential risk to the environment that has not yet materialised. This situation is where the precautionary principle comes to the fore, since according to international instruments and state practices, the principle allows states to take action when they can establish the threat of environmental harm. This could be achieved by the available data, which is at least to some extent based on science, but is not completely justified by science.

### **1.7.1 Why use the precautionary principle?**

The reason for specifically selecting the precautionary principle as the analytical framework to address the issues under the environment-related investment dispute in this research is multi-fold. First and foremost, as one of the most efficient environmental decision-making methods to protect the environment from future harm, the principle allows states to take actions before waiting for conclusive scientific evidence (once they could establish a serious or irreversible harm to the environment). This function is close to the intention behind most of the environment-related investment disputes. Hence, analysing the element and function of the principle could help to provide a benchmark, against which tribunals could assess whether the disputed environmental measure is rooted in a legitimate concern, or whether it is instead a protectionist or unreasonable measure, and should be considered a breach of an investment treaty provision.

In line with the previous point, the second justification is that the precautionary principle has some core elements that are widely referred to and repeated in most

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<sup>165</sup> See *Methanex award*, 77.

<sup>166</sup> See *Marion Unglaube award*, *infra* 293. *Santa Elena case*, *infra* 202.

<sup>167</sup> See *Parkerings award*, *infra* 297.

international environmental instruments. To provide a benchmark for assessment of states' environmental measures, these elements will be studied and used to facilitate an objective evaluation of environmental measures. Therefore, this research is not an attempt to argue that the principle by itself is the answer to the unsettled relationship between environment and investment, but rather suggests that it could play a role as a guiding tool. This would give tribunals a better perspective with regards to the environmental concerns that urge states to take action.

Moreover, as will be argued later under this section, compared with binding norms, precautionary principle as a soft law instrument has more flexibility to be applied. It could guide and inform the interpretation of investment provisions where the subject matter is an environmental measure that lacks conclusive science. Therefore, the lack of normative element could be perceived as an advantage, since it will not conflict with investment obligations to be settled by the investment tribunals. Rather, it suggests a holistic approach with a potential to integrate environmental concerns in the context of investment law. Perhaps, the principle helps in the interpretation of some of the imprecise and vague provisions in investment treaties such as FET in the context conflicting obligations of the host state.

Last but not least, the principle could operate as a double-edged sword.<sup>168</sup> This means that its application is not necessarily in favour of the host state's environmental measures, nor does it justify any environmental concern as an exception to investment treaty obligations. Rather, the precautionary principle, through a well-defined framework, could provide a benchmark against which investment tribunals could assess the environmental measures that are adopted, particularly for concerns over potential environmental harm. In other words, if the disputed measure does not reach to the level that the precautionary principle requires, it is likely that the claimed environmental concerns are not serious enough to justify a precautionary measure. As a result, a measure that, according to the host state, was adopted to prevent future environmental harm, but is not a serious concern under environmental law and regulations, cannot justify the economic losses that were imposed on the investor.

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<sup>168</sup> Joakim Zander, *The Application of the Precautionary Principle in Practice* (New York: Cambridge University Press, 2010), p. 77. He uses the expression to discuss the function of the principle in the EU law. This is due to the fact that the principle could be used as the justification by European institutions for legislation in harmonized areas and also by the member states as a shield against the free movement of products.



### 1.7.2 Definition

It is frequently said that the precautionary principle has not yet received a uniformly applicable and authoritative definition.<sup>169</sup> Admittedly, many instruments that name the principle do not define it at all, however they have often referred to Principle 15 of the *1992 Rio Declaration*<sup>170</sup>, which states that:

Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation<sup>171</sup>

Furthermore, a substantial number of instruments containing unspecified reference to the principle indicate at least some common understanding of its fundamental elements.<sup>172</sup> These common elements are the threat of harm, scientific uncertainty and taking action. In other words, when there is a threat of environmental harm, scientific uncertainty should not prevent states from taking action to protect the environment. These elements are not only described in the literature; in fact most environmental instruments display evidence of a certain threshold for each element. This will be discussed extensively in chapter three.

### 1.7.3 Status

The disagreement on the status of the precautionary principle under international law is one of the most controversial aspects that has interrupted the principle's wider application. The principle has been addressed in the numerous instruments, relevant treaties, declarations, resolutions, national legislation, executive decisions and jurisprudence- as well as in international judicial decisions and academic writings. Nevertheless, there is no consensus regarding the status of the principle under international law. In fact, this matter is the main point of departure among scholars regarding the applicability of the principle. Therefore, the question remains as to whether the inclusion of the principle in various international instruments indicates the existence of a universal principle of customary international law. Doctrine is largely divided in this respect. However, it is generally accepted that the precautionary principle

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<sup>169</sup>Hohmann, *supra* 159. pp. 334–5.; Zander, *supra* 164. p. 26.

<sup>170</sup>Trouwborst, *Precautionary Rights and Duties of States*, *supra* 118. p. 23.

<sup>171</sup>*Rio Declaration*, *supra* 128. Principle 15.

<sup>172</sup>Arie Trouwborst, *Evolution and Status of the Precautionary Principle in International Law*, 1st edn (Netherlands: Kluwer Law International, 2002); Trouwborst, *supra* 118; Trouwborst, 'The Precautionary Principle in General International Law: Combating the Babylonian Confusion'; Arie Trouwborst, 'The Precautionary Principle and the Ecosystem Approach in International Law: Differences, Similarities and Linkages', *RECIEL*, 18.1 (2009), 26–37; Arie Trouwborst, 'Prevention, Precaution, Logic and Law', *Erasmus Law Review*, 2.2 (2009), 105–27. 'The Precautionary Principle', in: W.C.G. Burns and J. Heinen (eds.),

is in a process of crystallization, and it appears that it is only a matter of time before a customary rule to this effect is established.<sup>173</sup>

Some commentators have argued that its adoption in a wide variety of more recent international instruments, and its elaboration in the *Rio Declaration* as a general guiding principle for taking action to protect the environment, lend weight to the argument that it has crystallized into a principle of customary international law.<sup>174</sup> This argument, in practice, suggests that there is an international obligation on states to take precautionary measures if the potential for damage reaches a certain level of gravity and probability.<sup>175</sup>

The other side of the spectrum is represented by those critics who believe that precaution is not even a principle, but is merely an approach that has only political application. Furthermore, the principle is vague, and its application prevents technological development. Opponents strongly claim that precautionary principle is not mentioned in any binding instrument and has not even got a unified definition. Therefore, they view it as being inapplicable.

Be that as it may, this research argues that the precautionary principle is a nonbinding instrument under international law with normative character. However, as the main

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<sup>173</sup> Gerhard Hafner and Isabelle Buffard, 'Obligations of Prevention and the Precautionary Principle', in *The Law of International Responsibility*, James Crawford, Alain Pellet and Simon Olleson (New York: Oxford University Press, 2010), p. 533.

<sup>174</sup> Laurence Boisson de Chazournes, 'Precaution in International Law: Reflection on Its Composite Nature', in *Law of the Sea, Environment Law and Settlement of Disputes*, Ndiaye and Wolfrum (Netherlands: Koninklijke Brill NY, 2007), pp. 21–34; James Cameron and Juli Abouchar, 'The Status of Precautionary Principle', in *International Investment and Protection of the Environment*, The Permanent Court of Arbitration/Peace Palace Papers, The International Bureau of the Permanent court of Arbitration (Netherlands: Kluwer Law International, 2001), pp. 29–52; Nicolas de Sadeleer, 'The Precautionary Principle as a Device for Greater Environmental Protection: Lessons from EC Courts', *RECIEL*, 18.1 (2009); Jaye Ellis, 'Overexploitation of a Valuable Resource? New Literature on the Precautionary Principle', *European Journal of International Law*, 17.2 (2006), 445–62 <<http://dx.doi.org/10.1093/ejil/chl005>>; Jaye Ellis and Alison FitzGerald, 'The Precautionary Principle in International Law: Lessons from Fuller's Internal Morality', *McGill Law Journal*, 49 (2004), 779; David Freestone, 'The Precautionary Principle', in *International Law and Global Climate Change*, International Environmental Law and Policy, Robin Churchill, David Freestone (Graham & Tortman/Martinus Nijhoff, 1991), pp. 21–40; Lothar Gundling, 'Status in International Law of the Principle of Precautionary Action, The The North Sea: Perspective on Regional Environmental Co-Operation: Part 1: The International North Sea Conferences in Perspective', *International Journal of Estuarine and Coastal Law*, 5 (1990), 23; Simon Marr, *The Precautionary Principle in the Law of the Sea: Modern Decision Making in International Law* (Martinus Nijhoff Publishers, 2003); McIntyre and Mosedale; Cymie R. Payne, 'Pulp Mills on the River Uruguay: The International Court of Justice Recognizes Environmental Impact Assessment as a Duty under International Law', *American Society of International Law, AISL Insight*, 14.9 (2010); Trouwborst, *Evolution and Status of the Precautionary Principle in International Law*; Philippe Sands, *Principles of International Environmental Law* (Cambridge University Press, 2003); Andre Nollkaemper, 'The Precautionary Principle in International Environmental Law - What's New under the Sun', *Marine Pollution Bulletin*, 22.3 (1991), 107–10; Günther Handl, 'Environmental Security and Global Change: The Challenge to International Law', *Yearbook of Int'l Environmental Law*, 1 (1991), 3; Charles Weiss, 'Scientific Uncertainty and Science-Based Precaution', *International Environmental Agreements: Politics, Law and Economics*, 3.2 (2003), 137–66.

<sup>175</sup> Hafner and Buffard, p. 525.

focus of this research, being nonbinding does not prevent it from guiding interpretation. It is argued that the principle indicates the direction of decision-making without indicating its parameters.<sup>176</sup> Chapter three and four will examine these parameters by looking at international instruments and jurisprudence. The outcome of these chapters provides a benchmark consisted of several questions to be asked by the tribunals. The statement of this thesis is that by asking these questions through the medium of treaty interpretation, the subject matter of the dispute (i.e. the environmental measure) will inevitably be put in perspective. This will bring the core elements of environmental supervision to the attention of the tribunals.

#### 1.7.4 Application

Having overviewed the definition and status of the precautionary principle, this section will move to the question of how the preferred analytical framework corresponds with the research question. In other words, this section examines the scope and legal framework under which the precautionary principle could be operationalized in the context of investment law.

BITs are typically limited to a short list of primary rules of investment protection, together with the provision for investor-state dispute resolution through arbitration.<sup>177</sup> It is argued that an approach that chiefly considers the economic interests of the investors probably cannot secure the states' regulatory room to manoeuvre.<sup>178</sup> Therefore, the investment treaties should not operate in a vacuum, but rather should be interpreted according to other applicable rules of international law.<sup>179</sup> As the annulment committee in *MTD v. Chile* declared, 'international law applies as a whole and BIT should not be

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<sup>176</sup> Prue Taylor, *An Ecological Approach to International Law: Responding to the Challenges of Climate Change*, 1st edn (London: Routledge, 1998), p. 25.

<sup>177</sup> Campbell McLachlan, 'Investment Treaties and General International Law', *International and Comparative Law Quarterly*, 57.2 (2008).

<sup>178</sup> Kevin Banks, 'NAFTA's Article 1110 - Can Regulation Be Expropriation', *NAFTA: Law and Business Review of the Americas*, 5 (1999), 499.

<sup>179</sup> See also: Campbell McLachlan, 'The Principle of Systemic Integration and Article 31(3)(C) of the Vienna Convention', *International and Comparative Law Quarterly*, 54 (2005), 279–320.; Campbell McLachlan, Laurence Shore and Matthew Weiniger, *International Investment Arbitration: Substantive Principles* (Oxford; New York: Oxford University Press, 2007).

regarded in isolation'.<sup>180</sup> In other words, tribunals need to look beyond the 'four corners of the treaty' obligations.<sup>181</sup>

It is hard to disagree with ICJ judge Ad Hoc Vinuesa's recent assertion in his dissenting opinion on the *Pulp Mills* decision that 'the precautionary principle is not an abstraction or an academic component of desirable soft law, but a rule of law within general international law as it stands today'.<sup>182</sup> This notion was also made in a separate opinion by Judge Trindade on the same case, arguing that the principle:

Has indeed taken shape, in our days, moved above all by human conscience, the universal juridical conscience, which is, ...the ultimate material 'source' of all Law, and of the new *jus gentium* of our times. Be that as it may, the fact that the Court has not expressly acknowledged the existence of this general principle of International Environmental Law does not mean that it does not exist.<sup>183</sup>

Thus, as a relevant and applicable principle of international law, the precautionary principle could play a role in the field of international investment law.<sup>184</sup> On the other hand, the precautionary principle has been argued to be a guiding standard for states and tribunals, and not a customary rule. This means that it is not binding for the states.<sup>185</sup> Bodansky has differentiated between 'rule' and 'standard', arguing that while the former defines exactly 'the permissible and impermissible', the latter is open ended; its application is defined by judgment and discretion.<sup>186</sup> This argument, however, does not contradict with the attempt to apply the precautionary principle under international law, in that an investment tribunal could still apply the principle as an interpretive tool.

Nevertheless, simply identifying the law as being applicable to an obligation of international law will not allow the tribunal to implement the principle into the investment context. Instead, the process of treaty interpretation should be followed to determine the extent and manner in which a principle, rule or standard is applied in the context of investment treaties.<sup>187</sup>

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<sup>180</sup> MTD award, *supra* 45, (Decision on Annulment) ICSID Case No ARB/01/7 (ICSID, 2007, Guillaume P, Crawford & Noriega).

<sup>181</sup> The term «four corners of the treaty » can be found in Campbell McLachlan, "The Principle of Systemic Integration and Article 31(3)(c) of the Vienna Convention", *International and Comparative Law Quarterly*, Vol. 54, Issue 2, April 2005, p. 280.

<sup>182</sup> Dissenting Opinion Of Judge *Ad Hoc* Vinuesa appended to the ICJ order *Pulp Mills on the River Uruguay* (Argentina v. Uruguay), (Judgment of Apr. 20, 2010).

<sup>183</sup> Separate Opinion Of Judge Cançado Trindade to the ICJ order *Pulp Mills on the River Uruguay*.

<sup>184</sup> These elements will be discussed in detail in chapter five.

<sup>185</sup> Bodansky, *Art and Craft of International Environmental Law*, *supra* 122, p. 105.

<sup>186</sup> *Id.*

<sup>187</sup> McLachlan, 'Investment Treaties and General International Law', p. 364.

This study will analyse two possible tracks that would enable tribunals to apply the precautionary principle. The first suggested path is through the evolutionary interpretation of the investment treaty and its ‘object and purpose’. This allows tribunals to take into account current concerns with respect to environmental protection, and in particular the precautionary principle, for the interpretation of the investment treaty provisions. The second method is the application of article 31.3.c VCLT (systemic integration). As provided under article 42(1) *ICSID Convention*, tribunals are required to decide investment disputes, in accordance with ‘applicable rules of international law.’<sup>188</sup> In any event, article 31(3)(c) VCLT requires that treaties be interpreted in light of the ‘relevant rules of international law applicable between the parties’.<sup>189</sup> Hence, interpreting the obligation of a host state under an investment treaty may require a consideration of other applicable rules of international law.<sup>190</sup> In Chapter five, it will be explained why the precautionary principle could be considered as relevant and applicable rule in terms of interpreting the investment provisions.

In addition to examining the applicability of the principle as a nonbinding principle under the article 31.3.c, it is argued that precautionary principle could be applied as one of the elements of the obligation of due diligence. The study proposes that the obligation of due diligence, containing a duty to apply precautionary principle as suggested by International Law Commission (ILC) and also offered by the ICJ in *Pulp Mills case* and ITLOS in *Advisory Opinion on Responsibility and Liability for International Seabed Mining*, could be an appropriate platform for the application of the principle. As will be explained in chapter five, one should be careful when making this argument in the context of investment regime, since under international law there is no general duty of environmental protection. Therefore, technically, obligation of due diligence could only be applied where the host state, under a separate treaty has an obligation to protect specific aspect of the environment. This situation allows the argument that wherever state has an obligation to protect (a specific aspect of the environment) it means it has an obligation of due diligence to ensure protection.

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<sup>188</sup>Convention on the Settlement of Investment Disputes between States and Nationals of Other States, art. 42, Oct. 14, 1966, 575 U.N.T.S. 159; see also MTD award, supra45; *Camuzzi Int’l S.A. v. The Argentine Republic*, ICSID Case No. ARB/03/2, Objections to Jurisdiction, 132-133 (May 11, 2005); *Aguaytia Energy LLC v. Republic of Peru*, ICSID Case No.ARB/06/13, 72 (Dec. 11, 2008).

<sup>189</sup> Vienna Convention on the Law of the Treaties, art. 31, May 23, 1996, 115 U.N.T.S. 331. (VCLT)

<sup>190</sup> See also: McLachlan, ‘The Principle of Systemic Integration and Article 31(3)(C) of the Vienna Convention’; McLachlan, ‘Investment Treaties and General International Law’; Phillippe Sands, ‘Searching for Balance: Concluding Remarks Regulatory Expropriations in International Law: Colloquium Articles’, *New York University Environmental Law Journal*, 11 (2002), 198.

The main proposition of this thesis is that the tool of treaty interpretation will provide a channel through which the tribunals can implement the precautionary principle. This will allow them to interpret the regulatory function of the states within their police power when not supported by conclusive scientific evidence. This could perhaps ensure a harmonious interaction between investment and environmental obligations, enhance the legitimacy of investment law, and assure more certainty and predictability in investment law.

Thus, to sum up, this research will employ the precautionary principle as an analytical framework to understand and balance the interests of host states and foreign investors. This will address questions concerning the assessment of the environmental measures by tribunals. It is expected that the lessons learned from the case law on the principle could be utilized into the investment context that may help to protect investors' rights, minimize abuse by host states and also ensures effective environmental protection. This analytical framework, including the criteria and a corollary element in form of questions, will be discussed in detail in chapters three and four.

### ***1.8 Methodology***

When addressing issues concerning the current approaches by investment tribunals in environment related cases, this research will focus on primary sources. These include BITs, Free Trade Agreements and the decisions of arbitral tribunals. As for secondary sources, this research will focus on books, reports and other academic work and commentaries. Two important research methodologies are employed to achieve the objectives of the study and find a way to suggest a legal method for objective assessment of the disputed environmental measures; these are doctrinal and comparative study approaches. The study of the precautionary principle and its application by the investment tribunals is a matter concerning fundamental legal concepts in public international law. As a result, the methodology for this research is primarily doctrinal and comparative.

The main objective of this research is to find a method to interpret investment provisions according to the environmental concerns. The relevant investment provisions therefore need to be examined, an interpretation of which is recommended under this study. These provisions are FET and expropriation. However, the standards are poorly and incoherently defined and evolved through cases concerning these obligations. Therefore, to better understand those obligations in the context of

environmental issues, the approaches of investment tribunals will be deduced from various environment-related investment disputes. This research will employ a deductive method to explore and understand the principles of law relating to the research.

Some of the important environment-related investment cases will be analysed to assess the approaches taken by tribunals. However, ‘environmental’ or ‘environment-related’ investment disputes are terms that should be used very carefully. Not all environmental elements in these disputes qualify them for such classification.<sup>191</sup> This research will focus mainly on those cases for which the application of domestic or international environmental law is at stake, or where the impact on the environment resulted in a measure by the host state as a response. This selection will therefore exclude cases that arose from the operation of investors in the environmental market.<sup>192</sup> In addition, cases will not be considered if the harm has already occurred and the dispute regards the states’ treatment of investors with respect to liability for causing environmental damage. In other words, since the lens through which the tension between environment protection and investment consideration will be approached is the precautionary principle, this research will only discuss cases that adopted the measure to protect the environment from a potential threat. This is not to say that no conclusion can be extracted from those awards as to the approach towards environmental concerns, however.

Later, a comprehensive study of this principle will be conducted to better understand the elements and content of the analytical framework, being grounded in fundamental doctrines of law. The doctrinal methodology will allow the fundamental concept of the elements and the thresholds of the principle to be crystallised. The final chapter will then discuss the fundamentals of the principle of interpretation in applying the precautionary principle.

It is anticipated that the outcome of this research will supply a very useful legal mechanism for international investment law. The crucial benefit from analysing the precautionary principle will be the answering of the question of whether it will be eligible to inform the interpretation of investment provisions. In addition, this doctrinal research will observe to what extent/how the precautionary principle can be transposed into international investment law.

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<sup>191</sup> Vinuales, *Foreign Investment and the Environment in International Law*, p. 17.

<sup>192</sup> Renewable cases under the Energy Charter Treaty.

Furthermore, the methodology applied for comprehensively studying ways to justify environmental considerations in the interpretation of investment treaties includes case law and comparative methods. For the purpose of this study, case law from the ICJ, ITLOS, ECHR, ECJ and WTO will help to understand the invocation of the precautionary principle. As will be explained in chapter three, some new mechanisms have been developed in the field of environmental law in response to current concerns for the environment and understanding the limitations of science. One of those mechanisms is precautionary decision making. Highlighting the developments in the field of environment, and the current threats that have been acknowledged globally, it is argued in this study that investment law (and tribunals in particular) do not seem to give this crucial matter the attention it deserves. Therefore, to some extent, this method will serve as a useful guide to international investment tribunals. It will indicate to them to what extent the precautionary principle, or states' concerns regarding the potential harm to the environment, has been used to inform the decisions when environmental concerns have interrupted economic benefits. It will also draw on the lessons learned about how other courts or tribunals have applied or mentioned the precautionary principle to allow states environmental measures.

For this reason, this research will practically demonstrate the meaning of taking into account the environmental concerns, and will help tribunals to make more informed decisions. In the meantime, a comparative study will lead to a comprehensive study. This will determine the extent to which a principle from environmental law can inform addressing similar issues in the field of investment law. This comparative study will thus examine the interdependence between international investment and environmental laws. In other words, it will explain to what extent a principle from a different field of international law can then be employed in an international investment context.

### ***1.9 Contribution***

This research, as explained, aims to comprehensively examine the invocation of the precautionary principle as a guide to inform the interpretation of the investment provisions. This is expected to contribute to the knowledge in this field in the following inclusive ways:

First and foremost, by putting forward a comprehensive study to provide a conceptual framework for the precautionary principle. Despite some piecemeal studies on the role that the principle could play in the investment treaty arbitration, no systemic research



has been conducted to provide a conceptual framework for its application under an investment treaty. Moreover, while touching upon the controversies on the status of the principle, the research suggests a way to apply the principle as a soft law instrument, capable of guiding the interpretation of treaty provisions.

Secondly, most studies provide a theoretical basis for environmental consideration by providing the legal basis such as arguments for police power, proportionality, systemic integration, contractual mechanisms, counterclaims, etc. This research however, in addition to providing a legal basis for the application of the precautionary principle, recommends some criteria to be applied by the tribunal. This should extend objectivity of the tribunals and predictability for the players in future cases.

In addition, the outcomes of this research will not impose on the tribunals to settle a tension between two conflicting norms, and it does not prescribe any one formula to resolve this tension. Rather, it suggests that as a soft law principle and highly relevant to the disputed matters, precautionary principle could guide the tribunals in their interpretation of the treaty standards.

Most importantly, by providing a benchmark through the elements of the precautionary principle, the research suggests that the principle could function as a double-edged sword by suggesting certain criteria. Assuming its successful application, the framework would allow investors to question the appropriateness of a measure. The framework would also provide a benchmark for the host states to assess their environmental measures, which would prevent them from being questioned by the investors, or would at least aid in their defence. This way, states could have a clearer idea of what constitutes a genuine measure when they are required to protect the environment from a potential future harm.

### ***1.10 Structure***

This research examines the challenges concerning the relationship between investment obligations and environmental protection, and studies how investment tribunals could practically integrate these two interests. It aims to provide a comprehensive framework for the tribunals to enable an objective assessment of the disputed environmental measures. This goal is achieved by learning how the precautionary principle allows states to take action where ‘scientific evidence concerning the scope and potential negative impact of the activity in question is insufficient but where there are plausible indications

of potential risks'.<sup>193</sup> It will also examine whether, and to what extent, such application is possible, according to international law and the rules of interpretation. Thus, the proposed thesis is structured into chapters that form a logical chain to answer the main and subsidiary research questions.

Chapter Two (as the first substantive chapter) will examine matters relating to environmental protection in the context of investment dispute settlement. It will also explore to what extent investment tribunals have considered environmental issues when assessing whether states have violated their obligations under investment treaties. In particular, this chapter will mainly highlight the different approaches that tribunals have adopted so far, and the inconsistency with respect to allowing environmental concerns into the context of the investment treaties. Furthermore, this chapter will examine how these inconsistent approaches could jeopardise the predictability of the investment regime for its addressees. Finally, it will conclude by detailing certain assumptions that tribunals have made with respect to environmental regulation, and will explain how those assumptions might have influenced the outcome of the disputes.

Chapter Three is dedicated to the conceptual background of the principle of precaution, its elements, and its status under international law. By analysing criticism of the principle, the chapter will respond to the alleged flaws of the principle that might constrain its application. The chapter also discusses different versions of the principle, and explains the potential role that it could play in both the procedural and substantive phases of dispute settlement. It will conclude with a clear framework on its element, which will be further complemented by a comparative study of the jurisprudence on the principle.

Chapter Four is a comparative study to complement the previous chapter on the analytical framework. It will analyse the application of, or references to, the precautionary principle by international tribunals such as International Court of Justice (ICJ), International Tribunal for the Law of the Sea (ITLOS), European Court of Justice (ECJ) and World Trade Organization (WTO). Although the contexts of the disputes and the mode of obligations that engaged the precautionary principle are completely different under these systems, they share the same essence. In most of those disputes, there is a tension between an economic interests and the protection of the environment

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<sup>193</sup> ITLOS Ad seabed, *infra* 767, para 131.

against potential damages, for which conclusive scientific evidence is lacking. Therefore, the study of these cases, considering their dissimilar context, will provide a practical basis to further justify the applicability and relevance of the precautionary principle. This chapter will conclude with a finalised framework for the precautionary principle for tribunals as a guiding tool for interpretation, under the investment law.

Chapter Five is dedicated to the synthesis of this research, addressing the tension between environmental concerns and provisions under investment treaties. This chapter will examine the application of the criteria mentioned to address the problem of environmental consideration under investment regimes. As indicated earlier in the current chapter as introductory remarks, a framework will be provided to justify the efficacy of the precautionary principle and its elements. This chapter will then examine how this framework could be transposed into the investment regime and be operated by investment tribunals to interpret the investment provisions. Two different paths are suggested to answer this fundamental question, providing different legal methods under international law for tribunals to apply the principle. The lessons learned from other jurisprudence can be very valuable for investment tribunals, in terms of exercising the available methods to operationalize the principle as a means to interpret the investment treaty provisions. This will allow them to consider environmental concerns into their assessment.

Chapter Six is the last chapter of this research, and will present the conclusions of the study.

## 2 Current Approaches

What is The Current State of Play in the Environment-Related Investment Dispute Settlement?

### 2.1 Introduction

The environmental component of investment disputes can be comprised of a wide range of environmental measures, based on the claims made by investors. They vary from a total ban on a product or phasing out an activity, to revocation of permit, performance requirements such as EIA and backfilling, delays in reviewing the project or issuing a permit.<sup>194</sup> These few examples demonstrate how every aspect of a state's initiation towards environmental protection has the potential to be challenged by investors as a violation of an investment provision. This can result in the state's environmental supervision being assessed by the investment tribunals, based on their legitimacy and compliance with treaty obligations.

Today, tribunals hardly consider an environmental measure to be expropriatory unless it proves to be a 'substantial deprivation' of the investment.<sup>195</sup> However, while the recognition of environmental concerns is improving, the triggers for claiming violation are also now changing. Claims regarding environmental related measures are now penetrating into the very delicate layers of environmental management and supervision.

The underlying argument of this study is that if the environmental motives behind the measures are not taken into account by investment tribunals, it will cause hesitation, and will discourage efficient supervision in achieving the ultimate goal of sustainable development (through giving ample attention to the environment as well as economic

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<sup>194</sup> For instance revoking permit in *Metalclad* supra 49 and *Parkerings* infra 295; Refused to renewal in *TecMed*, supra 64; Conditional permit in *Luccetti* infra; Total ban and phase out in *Methanex*, supra 71, *Vattenfall II*, supra 145; T zoning decisions in *Santa Elena* infra 199 and *Marion Unglaube* infra 291; Ecological Decree in *Metalclad* supra 49; Performance requirement and Mandatory backfilling, *Glamis*, supra 50; costly Environmental Impact Assessment in *Maffezini* infra 279; Pollution Clean up in *Palma*, infra; Possessing the project by the host state to prevent future damages in *Burlington*; Rejected EIA in *Bilcon*, infra 251.

<sup>195</sup> Thomas Waelde and Abba Kolo, 'Environmental Regulation, Investment Protection and "Regulatory Taking" in International Law', *International and Comparative Law Quarterly*, 50.4 (2001), 811–48 (p. 848).

development). Accordingly, the purpose of this chapter is to explore whether the investment tribunals, whose task is to clarify and apply the relevant laws and provisions of the investment treaties, have been following a pattern when facing environmental motives. This task will include looking at the claims made by investors, and also the responses provided by host states as their defence, to elaborate on the motives behind disputed measures. In particular, this chapter will focus on tribunals' decisions to understand patterns. It will also investigate whether (and how) tribunals have taken environmental considerations into account.

This argument is not *per se* novel, and has been justified on various grounds. In fact, the topic has been analysed from various perspectives.<sup>196</sup> However, considering the specific characteristics of the analytical framework of this thesis, i.e. the precautionary principle, the only cases that will be examined are those in which the environmental harm has not yet materialized. This means that disputes such as *Chevron v. Ecuador*<sup>197</sup> and *Perenco v. Ecuador*<sup>198</sup> will not be discussed, as in these cases the environmental harm had already taken place. In addition, the main arguments focused on the treatment of the host state in recognising liability and remediation for the damages.<sup>199</sup> Therefore, analysis will focus only on cases where the basis of the argument concerns the conduct of states in protecting the environment from future harm.

The cases will be studied under two main categories. The first category concerns cases that have been concluded with an award on merits, since they demonstrate tribunals' attitudes towards environmental components of the disputes. The second category includes cases that did not reach the merit phase for different reasons, namely, lack of jurisdiction, being settled or being pending. Although the latter category does not

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<sup>196</sup> Langer and Vinuales, 'Managing Conflicts Between Environmental and Investment Norms in International Law'; Vinuales, 'Foreign Investment and the Environment in International Law'; Vinuales, 'Foreign Investment and the Environment in International Law: The Current State of Play'; Di Benedetto, *International Investment Law and the Environment*.

<sup>197</sup> *Chevron Corporation and Texaco Petroleum Company v. Republic of Ecuador*, PCA Case No. 34877 (UNCITRAL Rules), Partial Award on the Merits (30 March 2010), Final Award (31 August 2011).

<sup>198</sup> *Perenco Ecuador Ltd. v. The Republic of Ecuador and Empresa Estatal Petróleos del Ecuador (Petroecuador)*, ICSID Case No. ARB/08/6, Decision on remaining issues of jurisdiction and on liability (12 September 2014); Interim Decision on the Environmental Counterclaim (11 August 2015).

<sup>199</sup> Also, some studies on environment-investment disputes have included the recent cluster of disputes under the Energy Charter Treaty regarding the EU renewable energy policy and the removal of feed in tariffs from renewables is not considered. Since, this research looking at the environmental principles to interpret the investment obligations and those cases are more about the economic aspects rather than environmental, they are excluded from this study.

contribute to finding a pattern as such, it will help to demonstrate the potential claims against state actions concerning the environment.<sup>200</sup>

## *2.2 Current Approaches*

As mentioned in the introduction, the main focus of this chapter is to find a pattern in the mind-set of investment tribunals. Hence, the subject matter will only include cases that have reached the merit phase and are able to represent tribunals' approaches towards the environmental element in the disputes. Thus, the decisions are divided into three categories.<sup>201</sup> The first category features decisions in which investment provisions were treated in isolation and environmental motives were regarded as being irrelevant (the first image in figure1). The second category concerns cases where the tribunal acknowledged the significance of environmental protection and recognised the regulatory space for the host states, but subordinated these motives to economic concerns and instead focused on the effect of the measures (the second image in figure1). The final category focuses on decisions in which the tribunals not only recognised the environmental protection, but also made more space in the investment treaties for environmental considerations (the last image in figure1). The tribunals in this category also interpreted these provisions in a way that accommodated and took into account the environmental protection as a legitimate motive, and thus raised the bar for violation of the investment treaty provisions.

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<sup>200</sup> To review the cases, particular attention is given to whether and how tribunals assess the environmental measures. For instance, how the tribunals assess the state's "intent" and the measure's proportionality, effectiveness, and scientific soundness. However, not all the cases are publically available and most of them have only made the award publicly available and not the statements of claims and defense.<sup>200</sup> Therefore, examining those cases is confined to the information highlighted and summarized by the tribunals. This makes a difference since some of the arguments and evidence that was provided by the responding states is crucial or sometimes game changing which the tribunals might have overlooked or considered unnecessary.

<sup>201</sup> Vinuales studies the decisions under three different categories: traditional, progressive and upgraded traditional approach. He argued that while the upgraded approach which allows more room to accommodate environmental consideration is better than traditional approach, this view has to change and a new mindset to look at the environmental concerns not as an exception but, through means of interpretation and an evolutionary interpretation, to be considered as part of the object and purpose and not an exception to the purpose. See: Vinuales, 'Foreign Investment and the Environment in International Law: The Current State of Play', supra 6.

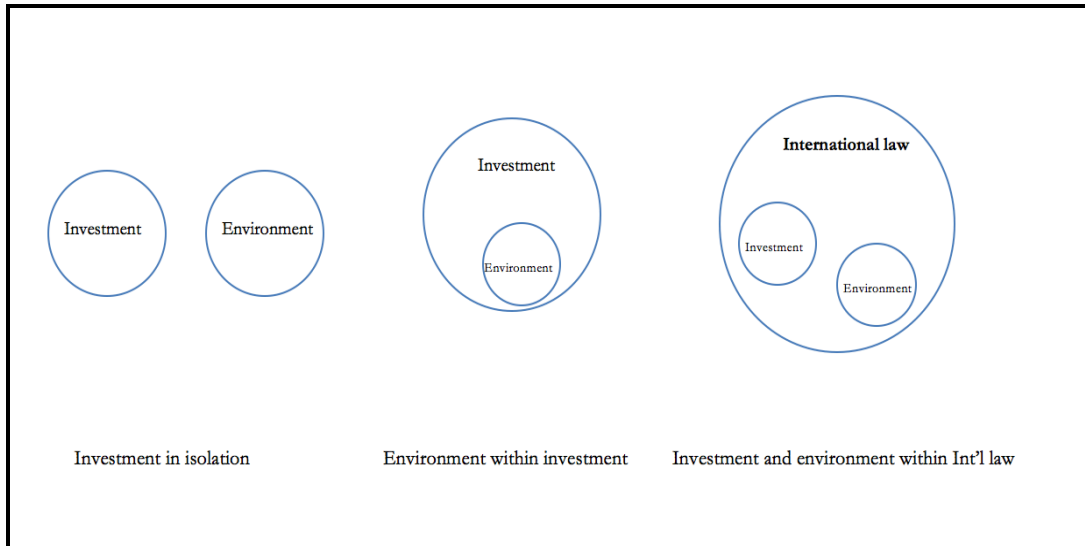


Figure 1: Approaches Towards Environmental Concerns by Investment Tribunals

### 2.2.1 Investment in Isolation

The most renowned instance under this category occurred in *Compañía del Desarrollo de Santa Elena, S.A. v. Republic of Costa Rica*, a 22-year dispute involving the expropriation by the Government of Costa Rica of a property known as ‘Santa Elena’. The case focused on the determination of compensation as a result of the expropriation, following a decree for Santa Elena to convert the investor’s property into a national park without taking permanent possession of the land or receiving title to it.<sup>202</sup> The expropriation was argued to be protecting a dry forest containing flora and fauna, which were valuable for scientific, educational and touristic purposes, and also protected beaches of particular importance for nesting sea turtles. These concerns resulted in a decision to extend the national park to preserve its biodiversity.<sup>203</sup> The tribunal held Costa Rica liable for the expropriation.<sup>204</sup> Although the main argument focused on the determination of compensation, and although both parties agreed on the occurrence of expropriation, the tribunal took a rather radical approach. They stated that:

While an expropriation or taking **for environmental reasons** may be classified as a taking for a public purpose, and thus may be legitimate, the fact that the Property was taken for this reason **does not affect** either the nature or the measure of the compensation to be paid for the taking.”...“the **purpose** of protecting the environment for which the Property was taken does not alter the legal character of the taking for which adequate compensation must be paid”...“the **international source of the (Respondent’s) obligation** to protect the environment **makes no**

<sup>202</sup> *Compañía del Desarrollo de Santa Elena S.A. v. Costa Rica*, ICSID Case No. ARB/96/1, Final Award (Feb. 17 2000). (Herein after Santa Elena Award).

<sup>203</sup> Expropriation decree, quoted in *Id.* para 18.

<sup>204</sup> *Id.* para. 281.

**difference.”...“the state’s obligation to pay compensation remains...no matter how laudable and beneficial to society as a whole.”<sup>205</sup>**

Although the tribunal’s opinion was merely shaped by the characteristics of this particular case, it demonstrates that the approach towards the investment obligations worked against the other concerns of the host states. Therefore, the question remains as to how the tribunal, with the same mind-set, would have reacted if they had considered an indirect expropriation? Hypothetically, if the government of Costa Rica had adopted a regulation by which any tourism activities were banned, or licenses were not renewed in the country and the property was not directly taken, would the tribunal have considered the environmental purposes irrelevant? Or, would they have ignored the international concerns over that particular species? These questions can be answered by looking at more cases in the field.

The *Metalclad Corp. v. the United Mexican States* dispute, which was brought under the NAFTA, is Another example of this category. The dispute was triggered by the Municipality denying a construction permit for a landfill facility that the investor had purchased. This occurred despite the fact that the investor had obtained a federal permit.<sup>206</sup> Metalclad purchased a landfill facility from a local company, which had a history of contaminating local groundwater, with the obligation to clean up pre-existing contaminants. After a series of challenges with the municipality and the federal government, the local company obtained a federal permit to construct the landfill.<sup>207</sup> However, the Municipality rejected the local company’s application to expand. It also refused to allow Metalclad to reopen the facility as a landfill due to community opposition and environmental hazards, since the company had failed to remedy existing onsite contamination.<sup>208</sup> It was later argued that neither the local company nor Metalclad had ever obtained any permit from the Municipality.<sup>209</sup> In a subsequent public meeting their permit was rejected again,<sup>210</sup> for the reason that the company had proceeded without a permit, failed to remedy the previous contamination, because of the

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<sup>205</sup> *Id.* para. 72. Emphasis added.

<sup>206</sup> *Metalclad Corp. v. the United Mexican States*, *supra* 55.

<sup>207</sup> Petitioners Reply, *United Mexican States v. Metalclad Corp.*, [2001] 89 B.C.L.R.3d 359 (Can.) (No. L002904). Para 8.

<sup>208</sup> *Id.*

<sup>209</sup> *Id.*

<sup>210</sup> This rejection was after and despite the negotiations that Metalclad had with the SEMARNAP (the Federal agency) and later, an Agreement (the Convenio) whereby Metalclad were authorized to operate the landfill for five years. The requirements for Metalclad were first to remediate the site for previous actions; secondly, to pay two Pesos for every ton of hazardous waste received and finally to employ local residents to perform manual labor at the site.<sup>210</sup>( Investor’s Memorial, para 47).



community opposition, and because of the adverse environmental impact of the landfill operation.<sup>211</sup> This event made Metalclad file the dispute for violation of NAFTA provisions. After the dispute was filed, the Governor of SLP issued an “Ecological Decree”, allegedly to protect an endangered cacti species.<sup>212</sup> Although the decree preserved the existing permits that were granted prior to its enactment, and the new establishment was allowed as long as the sustainability of natural resources was ensured, the tribunal found that the decree had the effect of barring forever the operation of the landfill.<sup>213</sup>

Regarding the obligation for FET, the tribunal decided that it had been breached in two ways. Firstly, the Municipality lacked the legal authority to issue a hazardous waste landfill construction permit; this was within the federal government’s authority.<sup>214</sup> Secondly, even if the municipality had the authority, the action was “improper”, and it should not have rejected the permit based on its environmental impact on the surrounding community.<sup>215</sup> It could only do so based on concerns about the soundness of the “physical construction”.<sup>216</sup> The tribunal also held that the Mexican government had “failed to ensure a transparent and predictable framework for Metalclad’s business planning and investment”.<sup>217</sup>

The importance of *Metalclad* was the authority of the Municipality, which was overlooked by NAFTA, the additional facility’s tribunals and other commentators. According to the facts presented in this case, the extent of the Municipal authority could be considered a game-changing element. Mexico, in its petition to the award, elaborated on this vital issue by providing two expert reviews on Mexican law. The expert reports confirmed that in addition to the construction and operation permits, the Municipality was entitled to “review the project’s impact on the local environment, health and safety concerns, previous unauthorized conduct of the applicant, and the social interests of the

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<sup>211</sup> *Id.*

<sup>212</sup> *Id.* 434.

<sup>213</sup> *Id.* para. 31.

<sup>214</sup> *Id.* para. 86; also: In Mexico, “Jurisdiction over waste management issues is divided among federal, state and municipal authorities. At the federal level, the Secretariat of the Environment and Natural Resources (SEMARNAT) has exclusive jurisdiction over all hazardous waste management. States and municipalities are responsible for the regulation, management, authorization and enforcement of solid and non-hazardous waste standards.” Summary of Environmental law in Mexico, available at: < <http://www.cec.org/lawdatabase/mx12.cfm?varlan=english> >. Accessed: 25/03/2015.

<sup>215</sup> *Id.* Paras. 86,92,106.

<sup>216</sup> *Id.*

<sup>217</sup> *Id.* para. 9.

Municipality as evidenced by residents' opposition".<sup>218</sup> This statement, however, was unnoticed by the tribunal in its decision.

This type of legislation does not appear out of thin air. The root of the problem therefore, is not the environmental legislation, or merely the denial of permit. As with most environment-related measures, it was the result of sustained local community struggle and opposition. The local community's opposition started well before Metalclad acquired the company. When the local company, from which Metalclad bought its toxic dump, refused to obey federal orders to close down in 1991, the residents started to enforce the order themselves by preventing tractor trailers from unloading more toxic waste.<sup>219</sup> Therefore, Metalclad was completely aware of the tension while negotiating to buy the facility. This was argued to be the reason that Metalclad had finalized the purchase, provided that the local company secured a municipal construction permit for the landfill.<sup>220</sup>

Considering the main question of this chapter, three points can be extracted from this case: the community opposition, the assurances given by the federal government and the denial of a permit by the Municipality. First and foremost, it is important to consider all of the elements that the decision makers should be mindful of. As will be explained in Chapter three, environmental concerns are multi-layered, and protection might be triggered by different combinations of events. The local community is one of the most common triggers of a government's action with regard to industrial activity. This is because the community tends to bear a disproportionate share of the negative impacts of the industrial activities. Their legitimate concern about the adverse environmental impacts of an activity, if approved by the authorities, could motivate the government to oppose it. In this case, the tribunal applied the "effect" test, and argued that considering the impact on the investment, the purpose was simply not relevant<sup>221</sup>.

Secondly, the expectation that there would be no disruptions to investment arose due to assurances that the investor had received from the Federal government. The tribunal did not take into consideration that the contested agreement was not a final approval for the activity. It instead was conditional, and to benefit from its provisions, the investor had to meet certain requirements. In environmentally sensitive activities, investors should

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<sup>218</sup> *Id.* Petitioners outline of argument, *supra* 207. para. 28.

<sup>219</sup> Gerard Greenfield, "Metalclad vs. Mexico, Toxic Waste and NAFTA", *Solidarity*, April 2001. < <http://www.solidarity-us.org/node/977> >.

<sup>220</sup> *Id.* para 15.

<sup>221</sup> Metalclad Award. *Supra* 55, para. 111.

expect that an assurance or pledge from the authorities that has been solicited through different means, other than official authorizations, does not represent final approval. The investors still have to receive the environmental permits to be formally authorized.

The last point concerns the permit that was denied by the Municipality. The investors never acquired a “construction and operation” permit from the Municipality. They also blamed the latter for not having the authority to object to the environmental impact on the community, which it indeed had. Therefore, Metalclad started its activity without having the required permits. Although this could also have been triggered by miscommunication between the federal and the Municipality. In fact, one could question the validity of this investment, which had started without fulfilling the official requirements. Overall, the main conclusion derived from these points is that the tribunal did not take into account the very basic concepts of environmental supervision elements when ruling on whether there had been a violation of FET or expropriation. This could render most of the supervising function of states (towards foreign investors) unfair and inadequate. Deciding on the fairness of the actions, as will be discussed later in chapter five, does still allow room for states to ensure environmental compliance for potentially harmful activities. By adopting this approach to the *Metalclad* case, it could be argued that the tribunal ‘established a precedent that could be interpreted as broadly limiting a state’s authority to engage in environmental protection’.<sup>222</sup>

*Tecmed v. United Mexican States* is the third instance in which a tribunal adopted an approach to block any other concerns that could influence the interpretation of the investment treaty provisions.<sup>223</sup> After purchasing a hazardous landfill site from a local company (through its subsidiaries, Tecmed and Cytrar), the investor requested a transfer of licences, as the new owners, from the authorities. However, instead of this transfer, the authorities issued a new license that was set to expire in three years, and had to be renewed annually after.<sup>224</sup> This policy was part of a general regulatory change, which allowed the government to control the compliance of the landfill sites.<sup>225</sup> Later, opposition against the Landfill operation from the local population increased, who demonstrated against the impact of the project.<sup>226</sup> As a result, the municipal government

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<sup>222</sup> Howard Mann and Monica Araya, ‘An Investment Regime for the Americas: Challenges and Opportunities for Sustainability’, *Yale Center for Environmental Law and Policy*, New Haven, 2001, p. 171.

<sup>223</sup> Tecmed award, *supra* 69, para. 36.

<sup>224</sup> *Id.* Para. 38.

<sup>225</sup> Andrew Newcombe, ‘Sustainable Development and Investment Treaty Law’, *Journal of World Investment & Trade*, 8.3 (2007), p. 408.

<sup>226</sup> Tecmed award, *supra* 70, para. 110.

and the company instigated negotiations to relocate the landfill.<sup>227</sup> In the meantime, the Sonora Human Rights Academy filed a criminal complaint against Cytrar for environmental crimes, based on irregularities and traces of transportation of contaminated soil.<sup>228</sup> In a later resolution, the authorities denied the renewal of the license for Cytrar, and requested that the company closed the landfill. This request was based on three factors. Firstly, the investor was only authorized to store agrochemicals and pesticides at the site, but they were also disposing biological and infectious waste. Secondly, the volume of waste confined at the site far exceeded the limit of one of the landfill's active cells, and thirdly, the landfill had operated as a transfer centre, for which it did not have the required authorization.<sup>229</sup>

In dealing with the expectation of the investor, the tribunal did not take into account the inherent purpose of changing the long-term permission to an annually renewable licence. This was an ex-ante measure that aimed to achieve efficient supervision over the environmentally sensitive projects. The tribunal stated that:

There is no doubt that, even if Cytrar did not have an indefinite permit but a permit renewable every year, the Claimant's expectation was that of a long-term investment relying on the recovery of its investment and the estimated return through the operation of the Landfill during its entire useful life.<sup>230</sup>

In addition to the application of the effect-based test to determine the expropriation,<sup>231</sup> the tribunal also applied the proportionality test. They did this to understand if there was a reasonable proportionality between the charge and the weight imposed on the foreign investor; they sought to realize this aim by any expropriatory measure.<sup>232</sup> The tribunal finally found that the government's action was not proportional to its actual purpose of addressing community pressure against the landfill,<sup>233</sup> which was decided

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<sup>227</sup> *Id.*

<sup>228</sup> *Id.* para. 108. Their concerns were firstly, the distance of the landfill from the urban center of Hermosillo, which was 8 km and according to the regulation -that was passed after the landfill establishment and therefore not retroactive- was supposed to be not less than 23km from any settlements of more than 10000 residents (award para. 106). Secondly, there were concerns over the transportation of contaminated soil from the plant in Baja California to the landfill (award, para. 49) Inspection was conducted by the Federal Attorney for Environmental Protection (PEROFERA) on several occasions and found open hazardous waste packaging bags in the trucks. In April 1998 PEROFERA found more irregularities and issued a fine against the company for there were circumstances that posed or may have posed a risk to the environment and health. (Award para. 107.)

<sup>229</sup> *Id.* para. 99.

<sup>230</sup> *Id.* Para. 149.

<sup>231</sup> *Id.* Para. 115.

<sup>232</sup> *Id.* Para. 122.

<sup>233</sup> *Id.* Para. 128

using the political circumstances as the basis for the measure. Even though there were minor violations of the permit's terms, the tribunal found the actions of the Mexican government to be expropriatory, and hence found that the investor required compensation.<sup>234</sup> It held that:

It would be excessively formalistic . . . to understand that the Resolution is proportional to such violations when such infringements do not pose *a present or imminent risk to the ecological balance or to people's health*, and the Resolution, without providing for the payment of compensation as required by Article 5 of the Agreement, leads to the neutralization of the investment's economic and business value and the Claimant's return on investment and profitability expectations upon making the investment.<sup>235</sup>

The facts of the case and the reasoning of the tribunal demonstrate some critical aspects of the tribunal's approach, with respect to the environmental regulations and the state's room for manoeuvre. Firstly, when applying the FET standard the tribunal stated that it is the basic expectation of the investor that states should act in a consistent manner. It stated that:

The claimant's expectation was that of a long-term investment relying on the recovery of its investment and the estimated return through the operation of the landfill during its entire useful life.<sup>236</sup>

On the one hand, the tribunal focused on the investors and their expectation, without considering how could they not expect interruption from the government, given that they were infringing on the environmental laws of those states. This was also approved by the court. On the other hand, in the field of environmental protection it is almost impossible for a state to act in a consistent manner when the subject matter is a long-term industrial project. The only exceptions to this are situations where the state has specifically made assurances to the investor. The legitimate expectation, therefore, should not have been determined based on the assumptions of the investors. They should instead have been based on facts of the case, the history of the state's measure, the situation in which the investor has started the business, the general understanding of the type of regulation, and in this case, the peculiarities of environmental concerns regarding hazardous waste landfill sites.

Secondly, the tribunal applied the principle of proportionality to analyse whether the act of the state had been expropriatory. This allowed them to determine whether the actions or measures were proportionate to protect the public interest, to judge the

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<sup>234</sup> *Id.* Paras.151, 187-97.

<sup>235</sup> *Id.* Para. 149. Emphasis added.

<sup>236</sup> *Id.* Para.149.

protections that were granted to the foreign investors under the treaty and to take into account the significance of the impact of those measures on the investment. The tribunal concluded that it would have been “excessively formalistic” to determine whether the measure had been proportionate, when such infringements by the investor “do not pose a present or imminent risk to the ecological balance or to people’s health”<sup>237</sup>. The fact that the investor had lost its investment made the measure expropriatory. This statement is extremely controversial in the context of environmental regulation. Using the words “present” or “imminent” when describing risks has a particular meaning in this context, and environmental protection is not only limited to these kind of risks.<sup>238</sup> Moreover, the tribunal failed to consider the context when determining whether the measure was proportionate to the risks, without which the concept would have been an abstract term.

### 2.2.2 Environment within Investment

This section will consider decisions in which environmental motives were acknowledged, but were subordinated to investment agreements and their provisions. In *S.D. Myer v. Canada*, for instance, the tribunal stated that the determination of a FET violation must be made in light of the high measure of deference that international law generally extends to the right of domestic authorities when regulating matters within their own borders.<sup>239</sup> However, the tribunal considered article 1114(1) of NAFTA, a provision on environmental concern, merely “hortatory”.<sup>240</sup> The tribunal did not consider that the Basel Convention, which Canada used to justify the measure with respect to the international obligation, had any merits. The tribunal acknowledged the state’s right to regulate, and that acknowledges that it was not its place to second-guess the government’s decisions. However, it held the Canadian government responsible for the violation of the FET standard.<sup>241</sup> The tribunal referred to the WTO/GATT precedent, and held that states, in achieving their chosen level of environmental protection, are obliged to choose an alternative that is “most consistent with open trade”.<sup>242</sup>

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<sup>237</sup> *Id.*

<sup>238</sup> This point will be explained in depth in Chapter Three, which concerns the environmental regulation and the different mechanisms to control environmental risks at several levels.

<sup>239</sup> *SD Myer award*, *supra*, 60, para. 263.

<sup>240</sup> *Id.* para 121.

<sup>241</sup> *Id.* para 261.

<sup>242</sup> *Id.* para. 231. Emphasis added.

By ruling in this way, the tribunal overlooked many reasons that proved Canada's legitimate concerns. Among these motives were the *Basel Convention*, the criminal lawsuit filed by the Syria club, and last but not least, the US bans on unnecessary transportation, which demonstrated that it shared the same concerns over this matter. The parties shared their understanding of the adverse environmental and health impacts of PCBs,<sup>243</sup> and their high toxicity. Canada, as a signatory to the *Basel Convention*, and also as a prudent decision maker, was concerned about the transportation of the material when exported without appropriate assurances of safe transportation and destruction.<sup>244</sup>

In *Burlington Resources Inc. v. Republic of Ecuador*, the investor suspended the operation of its project (two blocks under production sharing contract with Ecuador), and Ecuador intervened in these two blocks. Allegedly the state intervened to prevent significant risks threatening the sites.<sup>245</sup> The risk of environmental damages caused by leaks and spills was one of several risks mentioned by Ecuador when triggering the intervention.<sup>246</sup> When investigating whether Ecuador's actions were expropriatory, the tribunal started by asking whether Ecuador's measure was justified under the police power doctrine.<sup>247</sup> It then relied on the expert report provided by the review panel, and held that the panel did not conclude that there was a significant risk. The report only identified a "potentially" significant risk of damage, which means that the panel's decision was based on incomplete information.<sup>248</sup> Therefore, the tribunal was not convinced that the suspension posed such a significant risk of damage.<sup>249</sup> According to the tribunal, the measure was not an act of police power, since the evidence did not justify immediate intervention necessary to prevent serious and significant damage to the blocks.<sup>250</sup> Therefore, it ruled for an unlawful expropriation.<sup>251</sup> By focusing on the claims made by investors and their perception of the investment treaties, tribunals put the investor in a superior position to undermine environmental concerns.<sup>252</sup> The tribunals do not therefore make reference to the defence statement, or the environmental practice of the state (to a level as basic as what is 'significant' or 'potentially significant').

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<sup>243</sup> Polychlorinated biphenyls.

<sup>244</sup> SD Myer Award, para. 152.

<sup>245</sup> *Burlington Resources Inc. v. Republic of Ecuador*, ICSID Case No. ARB/08/5, Decision on liability, Dec 14, 2012.

<sup>246</sup> *Id.* para. 507.

<sup>247</sup> *Id.* Para. 507.

<sup>248</sup> *Id.* Para. 519.

<sup>249</sup> *Id.*

<sup>250</sup> *Id.* Paras. 528, 529.

<sup>251</sup> *Id.* Para. 545.

<sup>252</sup> The section on Environment within Investment supra 2.2.2.

The last example under this category, *Clayton and Bilcon of Delaware Inc. v. Government of Canada*, is a recent and highly controversial dispute that relates to a quarry and shipping project in the province of Nova Scotia.<sup>253</sup> The alleged inappropriate treatment was argued to be a breach of the NAFTA “Minimum Standard of Treatment” and “National Treatment”.<sup>254</sup> The investor presented *inter alia* a number of claims against the review panel. These included a lack of jurisdiction, delays in the process, biased panel arrangements and improper methodology.<sup>255</sup> Since the core argument for the breach of NAFTA investment provisions is closely relevant to this study, the next few paragraphs will explore the decision in more detail.

The initial proposal was based on a 3.9-hectare quarry within a 154-hectare area of land. It later became apparent that the ultimate plan was to expand to 124 hectares.<sup>256</sup> According to Canadian law, the Environment Impact Study (EIS) for projects above four hectares should be approved by a Joint Panel Review (JPR). This review should consist of both federal and state experts and authorities. The following paragraphs will explain some of the relevant claims, and will also explore the tribunal’s analysis.

One of the crucial arguments made by the claimant was that the JRP requested “perfect certainty”, which it claimed to be impossible. Canada responded by stating that the burden of providing evidence that the proposed project would not cause significant adverse environmental harm was on the investors, as the EIS required. Canada also denied asking for “perfect certainty”, and claimed that the problem was that “the proponent failed to provide complete and sufficient information” on the safety of the project, which is different from perfect certainty.<sup>257</sup> Moreover, it stated that the Panel, according to its experience in previous decisions, was well aware that “the predictive nature of an EIA is not an excuse for a proponent to provide incomplete and deficient information, as the Claimants provided here”.<sup>258</sup> Canada further explained the criteria for EIA:

Requires sufficient detail about the project to predict the “likelihood” that there will or will not be “significant, adverse” environmental effects. It also requires sufficiently detailed information to assess whether or not, or to what extent, the mitigative

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<sup>253</sup> *William Ralph Clayton, William Richard Clayton, Douglas Clayton, Daniel Clayton and Bilcon of Delaware Inc. v. Government of Canada*, UNCITRAL, PCA Case No. 2009-04, Dec 3, 2009. [Amended statement of claim].

<sup>254</sup> NAFTA articles 1105 and 1102.

<sup>255</sup> *Id.* Para. 36.

<sup>256</sup> Bilcon award, *supra* 255.

<sup>257</sup> *Id.* para. 414.

<sup>258</sup> *Id.* Counter-memorial. para. 370



measures the proponent proposes will work”.... “The JRP recognized that EA is a future-looking predictive process that cannot achieve perfect certainty.<sup>259</sup>

The claimant also alleged that there was a lack of transparency in the process and methodology, since the project was referred to the JPR without notice being given to the investors.<sup>260</sup> Canada, however, responded that sufficient advance notice was given to the claimant via EIS Guidelines, which included the factors that the JPR intended to consider during its review of the project.<sup>261</sup> Among these factors were some concepts that the panel would focus on, such as “traditional knowledge, the precautionary principle, and the project’s socio-economic effects, such as the effects on core community values.”<sup>262</sup> These elements were all mentioned in the EIS guidelines, and were made available to the investors, to which they did not make any objections.<sup>263</sup>

Most importantly, the main argument by the investor, was the problematic “core community value”. The panel relied on this concept when recommending the rejection of the project, and according to the investor it “ignored relevant facts and relied upon arbitrary, biased, capricious, and irrelevant considerations.”<sup>264</sup> This argument was central to the tribunal’s findings on treaty violation. The investor argued that the concept of “community’s core value” was not defined anywhere in Canadian law, and so Canada should not have been able to reject the project based on a new concept that it made up itself. In this respect, Canada responded that “community core values” were merely a restatement of the company’s requirement to show the project did not unduly affect the “human environment” in the area. Moreover, the Nova Scotia Environment Act (NSEA) expressly required considerations of socio-economic effects of the projects, which were the same effects featured in “community core values”, according to the investor’s expert witness.<sup>265</sup> Canada stressed that the *potential for significant adverse environmental effects* of the project dictated that the project should be subjected to the most vigorous form of review, under applicable environmental assessment laws.<sup>266</sup>

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<sup>259</sup> *Id.* Counter-memorial, para. 370

<sup>260</sup> *Id.* Award, paras. 361-2

<sup>261</sup> *Id.* Counter-memorial, para. 375

<sup>262</sup> *Id.* para. 375

<sup>263</sup> *Id.* Award, para. 416.

<sup>264</sup> *Id.* para. 362

<sup>265</sup> *Id.* Counter-memorial, para. 379.

<sup>266</sup> *Id.* Paras. 50-53. In its mandate and also a letter for referring the proposal to the JPR, in addition to terms of reference, the panel had the discretion to ask for further information. Accordingly, the panel amended the guideline after having community consultation and recognizing their concerns, and asked the investor to address those issues in its EIS to which the investor did not object. However, after the evaluation of the EIS conducted by the investor, the panel concluded that the adverse impact of the

Indeed, Canada's Statement of defence devoted several pages to discuss the sensitive ecological environment in which the proposed project was to be sited, and where blasting, quarrying and shipping would take place. Canada noted that the coastal site was an important breeding ground for several species of whales, including "the world's most endangered large whale, the North Atlantic right whale". Other endangered species included Leatherback Turtles, as well as other "species of concern".<sup>267</sup> The review panel was convened to review the project in light of sixteen specific factors, including its environmental and "socio-economic" effects.<sup>268</sup>

The conclusion by the tribunal, in a nutshell, was that the investors had an expectation to be treated according to Canadian laws. However, the rejection of the project based on the JPR report, which adopted the concept of "Community Core Value", occurred without prior notice, and that the concept was not included in the law. Also, the tribunal concluded that the panel exceeded its mandate by making the decision instead of identifying the adverse effect of the project after the mitigation. The end result was a breach of the duty of FET, being arbitrary, lacking due process, and not fulfilling the expectation of the claimant.

The tribunal recognised the regulatory power of the host state, and acknowledged that economic development and environmental integrity are not necessarily conflicting and can be mutually reinforcing.<sup>269</sup> It also emphasised the discretion of the host state; they are free under NAFTA to determine the level of protection and environmental standards.<sup>270</sup> For instance, even if the laws in place at the time of investment require the project to be approved by a public referendum, this is not against NAFTA provisions.<sup>271</sup> The tribunal therefore explicitly stated that it is not conducting its own environmental assessment in substitution of the review panel, and asserted its role would be to examine if the measure had been consistent with the laws of Canada in place at the time of

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project were so serious that it could not be mitigated and recommended that the proposal should be rejected.

<sup>267</sup> *Id.* Para. 9.

<sup>268</sup> Canada's Statement of Defense, para. 58. The terms of reference required the investor to be considered in its assessment. These included, inter alia, location of the proposed quarry and marine terminal and the nature and sensitivity of the surrounding area, the socio-economic effects of the proposed project, any cumulative environmental effects that are likely to result from the project and public comments.

<sup>269</sup> Bilcon award, *supra*, 253, para. 597. In fact, it allocated several paragraphs at the end of its decision to the importance of environmental protection and how tribunal approaches its relationship with investment protection (additional observation. Paras. 733-741. This part was clearly added after (15 March 2015) the dissenting opinion by McRae (10<sup>th</sup> March 2015)).

<sup>270</sup> *Id.* Award paras. 598 and 733-739.

<sup>271</sup> *Id.* para. 599.

investment.<sup>272</sup> The tribunal even went further by declaring that states are allowed to vest in any institution, by law, a mandate to evaluate the project.<sup>273</sup> More importantly, they recognised the margin of appreciation by stating that:

Errors, even substantial errors, in applying national laws do not generally, let alone automatically, rise to the level of international responsibility vis-à-vis foreign investors. The trigger for international responsibility in this particular case was the very specific set of facts that were presented, tested and established through an extensive litigation process.<sup>274</sup>

Ultimately, the tribunal seemed to be relying merely on the statement made by the claimant, instead of investigating the JRP report to find the breach of obligations. For instance, the main claim in the dispute was the concept of “community core value”, which allegedly was made up by the panel and did not exist in Canadian law. Instead of looking at the whole circumstances, or at least the review report and the guidelines, the tribunal took the claim at its face value. They attempted to interpret the meaning of the concept completely out of context, and speculated on its meaning. Therefore, instead of looking at the context in which the phrase was used,<sup>275</sup> the tribunal assumed what the JPR might have meant when writing the report, and concluded that none of the interpretations were acceptable as an excuse to use that approach.<sup>276</sup> The tribunal could have understood what the ‘community core value’ meant by looking at the comprehensive amended guideline provided by the JPR after consulting with the local community and identifying the concerns based on their mandate to include socio-economic study.<sup>277</sup> This, combined with the emphasis that the JPR placed on the community, could easily have shown the tribunal why the JPR recommended the rejection of the proposal. This factor alone could have changed the way the tribunal looked at the report and the measure. This example demonstrates the main statement that this research is tending to make: that a tribunal’s approach towards the environment –based on current concerns and practices- could be a game changer in the outcome of environment-related investment disputes.

### **2.2.3 Investment and Environment within International law**

The last set of cases described a much broader approach by the tribunals in accommodating environmental protection. In a way they viewed both environmental

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<sup>272</sup> *Id.* para. 602.

<sup>273</sup> *Id.* para. 738.

<sup>274</sup> *Id.*

<sup>275</sup> Dissenting Opinion of Professor Donald McRae, 10 March 2015.

<sup>276</sup> *Id.*

<sup>277</sup> Socio economic study was part of the mandate

law and investment law within the bigger framework of international law. Therefore, this sub-section focuses mainly on the aspects of tribunals' reasoning in which environmental protection was factored into the interpretation of treaty provisions (to determine whether a disputed measure was a violation of a treaty provision).<sup>278</sup> However, this has not been achieved through general rules of treaty interpretation, but rather through indirectly raising the bar for finding violations of treaty provisions, for the benefit of a state's regulatory power and space.

In the decisions featured under this category, the tribunals looked at the issue from a much wider perspective. They achieved this by decreasing the magnification of investment provision, and looking at the dispute from the point of view of international law. Therefore, the evolution of the nature of environmental concerns and protection methods was used to justify the necessity to accommodate them in their interpretation of treaty provisions. In the previous section, environmental law seemed to be taken into account as an exception to the investment provisions, and was therefore interpreted narrowly. In the following decisions, the tribunals made room for environmental concerns in investment law.<sup>279</sup>

For instance, in *Chemtura v. Canada*, the tribunal referred to and quoted the *Mondev* case to determine the claimed violation of the FET:

Both the substantive and procedural rights of the individual in international law have undergone considerable development. In the light of these developments it is unconvincing to confine the meaning of "fair and equitable treatment" and "full protection and security" of foreign investments to what those terms – had they been current at the time – might have meant in the 1920s when applied to the physical security of an alien. To the modern eye, what is unfair or inequitable need not equate with the outrageous or the egregious. In particular, a State may treat foreign investment unfairly and inequitably without necessarily acting in bad faith.<sup>280</sup>

In *Emilio Agustín Maffezini v. The Kingdom of Spain*, the claimant had invested in the production and distribution of chemical products. They claimed that Spain was responsible for the additional costs that resulted from the EIA.<sup>281</sup> This was because the

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<sup>278</sup> Vinales considers this view as upgraded traditional approach in which more room is made in investment regime in order to accommodate environmental concerns. See: Vinales, 'Foreign Investment and the Environment in International Law: The Current State of Play', supra 6.

<sup>279</sup> For the distinction between Carve-out and exception see: Jorge E. Viñuales, 'Foreign Investment and the Environment in International Law: The Current State of Play', in Kate Miles(ed.), Research Handbook on Environment and Investment Law (Cheltenham: Edward Elgar, forthcoming 2016), chapter 2.

<sup>280</sup> *Mondev International Ltd. v. United States of America*, ICSID Case No. ARB(AF)/99/2 , Award of 11October 2002, Para 116,117,125. Cited in para 121 Chemtura Award.

<sup>281</sup> *Emilio Agustín Maffezini v. The Kingdom of Spain*, ICSID case No ARB/97/7. November 9, 2000. [Hereinafter, Maffezini Award].

company continued with the project before the EIA was finalized and the environmental effects of the project were known.<sup>282</sup> This additional cost allegedly made the investor stop the construction work. When deciding whether Spain's request for an EIA was legitimate, the tribunal made an important statement acknowledging the importance of the EIA to prevent environmental damage:

The Tribunal has carefully examined these contentions, since the Environmental Impact Assessment procedure is basic for the adequate protection of the environment and the application of appropriate preventive measures. This is true, not only under Spanish and EEC law, but also increasingly so *under international law*.<sup>283</sup>

In addition to the requirement of an EIA under International law, the tribunal considered that environmental protection was not an exception to the investment protection. It was Spain's duty to ensure that the environment was well protected, regardless of imposing economic loss on the investor:

the public authorities, relying on the necessary public solidarity, **shall ensure** that all natural resources are used rationally, with a view to safeguarding and improving the quality of life and protecting and restoring the environment.<sup>284</sup>

It also emphasized that under the EEC Directive, the EIA has to be conducted before the approval of any project that is '*considered to have significant environmental implications*'. They stated that under Spanish law the project could even have been suspended if the work had begun before the approval of the EIA.<sup>285</sup> Finally, the tribunal held that Spain could not be held responsible for the additional costs that were imposed on the investor by conducting an EIA study.<sup>286</sup> In making their decision they considered the relevant BIT, which "calls for the promotion of investment in compliance with national legislation", and also states that Spain only "insist on the strict observance of the EEC and Spanish law applicable to the industry in question". This holistic attitude of the tribunals was maintained and exercised throughout the whole process of attending each claim of violation, and influenced their application of the investment law.

**Legitimate expectation** is one of the main triggers that investors draw on to justify violation of FET. In *Methanex v. United States* for instance, an executive order was issued

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<sup>282</sup> *Id.* Para. 65.

<sup>283</sup> *Id.* Para. 67.

<sup>284</sup> Constitución Española, December 27, 1978, Boletín Oficial del Estado, No. 311. December 29, 1978, Article 45, As translated in European Court of Human Rights, Case López Ostra v. Spain, Case No. 41/1993/436/515, December 9, 1994, paragraph 23.

<sup>285</sup> Maffezini Award, para. 69.

<sup>286</sup> *Id.* Para. 71.

to regulate MTBE,<sup>287</sup> which resulted in its phase out in Californian gasoline. This order was triggered due to concerns over significant risks resulting from the contamination of surface water and groundwater by MTBE.<sup>288</sup> To determine whether the measure had been a breach of FET by not fulfilling the expectations of the investor, the tribunal noted that:

Methanex entered a political economy in which it was widely known, if not notorious, that governmental environmental and health protection institutions at the federal and state level, operating under the vigilant eyes of the media, interested corporations, non-governmental organizations and a politically active electorate, continuously monitored the use and impact of chemical compounds and commonly prohibited or restricted the use of some of those compounds for environmental and/or health reasons.<sup>289</sup>

In understanding the expectation of the investor, the tribunal also considered the role of stakeholders in environmental regulation in the host state. They asserted that “the process of regulation in the United States involved [the] wide participation of industry groups, non-governmental organizations, academics and other individuals, many of these actors deploying lobbyists.”<sup>290</sup>

To further dismiss the claims brought forward, the tribunal in *Chemtura* also referred to the investor as a “sophisticated registrant experienced in a highly-regulated industry” that should have been familiar with the review process and the PMRA practice.<sup>291</sup>

In several instances the investors also claimed that the treatment of the host state had not been fair and equitable due to the **delays** in processing their applications. The tribunal excluded the delay by the decision maker from the scope of the FET by stating that:

Tribunal must take into account the obvious fact that the operation of complex administrations is not always optimal in practice and that the mere existence of delays is not sufficient for a breach of the international minimum standard of treatment.<sup>292</sup>

In *Marion Unglaube And Reinhard Unglaube v. Republic Of Costa Rica*, the tribunal defined a high threshold for violating the legitimate expectation by stating that:

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<sup>287</sup> Methyl Tert-Butyl Ether is a gasoline additive, used as an oxygenate to raise the octane number.

<sup>288</sup> *Methanex v. United States of America*, supra 76, para. 26. In November 1998 the University of California issued a report on the environmental assessment of MTBE following an incident in California in 1990s which MTBE had leaked from tens of thousands of underground storage tanks across the country and polluted groundwater and caused a significant environmental crisis. Thomas O. McGarity, “MTBE: A Precautionary Tale”, *Harvard Environmental Law Review*, vol.28, 2004, p.281.

<sup>289</sup> *Methanex Award*, supra 77, Part IV - Chapter D, para. 9.

<sup>290</sup> *Id.*

<sup>291</sup> *Chemtura Award*, supra 74, para.149.

<sup>292</sup> *Id.* para. 215.

To satisfy such requirements the claimants must demonstrate reliance on specific and unambiguous State conduct, through definitive, unambiguous and repeated assurances, and targeted at a specific person or identifiable group.<sup>293</sup>

Playa Grande is a beach on Costa Rica's Pacific coast, and is also an important site where female Leatherback Turtles lay their eggs. Given the endangered status of these turtles, and Costa Rica's well-known reputation as an eco-tourism destination, the Government of Costa Rica has taken steps intended to protect this nesting habitat.<sup>294</sup> Referring to the measures and administrative processes, and their impact on both phases of properties, the tribunal commented that "an intelligent and experienced investor" claimant is required to become familiar with the host state's law and administrative process as part of their due diligence.<sup>295</sup> The tribunal acknowledged that the process might be different from what the investor expected, but governments are granted a "considerable degree of deference" with respect to their regulation and administration, and their actions cannot be considered unfair and inequitable. The tribunal further affirmed that:

Unless they involve or condone arbitrariness, discriminatory behaviour, lack of due process or other characteristics that shock the conscience, are clearly improper or discreditable or which otherwise blatantly defy logic or elemental fairness.<sup>296</sup>

In *Parkerings*, the tribunal referred to the decision by *MTD v. Chile* when concluding on a measure to refuse the investment proposal for making a parking project next to a historical venue. This referral emphasised that the "state is not responsible for the consequences on unwise decisions or for the lack of diligence of the unwise investors. Their responsibility is limited to the consequences of its own action to the extent they breached the obligation to treat the claimant fairly and equitably".<sup>297</sup>

In *Palma v. Bulgaria*, the investor was charged for the pre-acquisition pollution clean-up costs.<sup>298</sup> The tribunal rejected the claimant's argument to hold a host state reliable for the change in its law, and thus liable under the ECT. The tribunal held that *the investor has to demonstrate* that reasonable and justifiable expectations were created in that regard,

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<sup>293</sup> *Marion Unglaube And Reinhard Unglaube v. Republic Of Costa Rica* (ICSID CASE No. ARB/08/1) (ICSID CASE No. ARB/09/20), May 16, 2012. [Hereinafter, Unglaube Award].*Id.* Para. 270.

<sup>294</sup> *Id.* Para. 37.

<sup>295</sup> *Id.* Para. 258.

<sup>296</sup> *Id.* Para. 258.

<sup>297</sup> *Parkerings-Compagniet AS v. Republic of Lithuania*, ICSID Case No. ARB/05/8, Award (11 September 2007). [Parkerings v. Lithuania], para 308.

<sup>298</sup> Decision on Jurisdiction in the case of *Palma Consortium Limited v Republic of Bulgaria*, ICSID Case No. ARB/03/24. 8 February 2005. Para. 198.

and in this case it did not appear to the tribunal that Bulgaria had made any presentation to freeze its legislation on environmental law.<sup>299</sup>

A balanced approach could also influence the **standard of review**, which defines the level of scrutiny into a state's measures. In *Methanex v. USA*, the investor alleged that the environmental protection had been a sham and a pretext for political concerns. The tribunal took into account all of the expert evidence from both parties, and concluded that the US report was reflecting a "serious", "objective" and "scientific" approach, and was "subjected at the time to public hearings, testimony and peer-review". It added that "a serious scientific work from such an open and informed debate" proved that the ban was not a political sham.<sup>300</sup> In addition, the tribunal acknowledged that it was not scientifically incorrect, and was "impressed by the scientific expert witnesses presented by the USA and tested under cross-examination by Methanex".<sup>301</sup> The tribunal did not use *Methanex's* scientific report (which contested the finding by state agency) to reject the US Study. They instead stated that other scientific reports and opinions may disagree with the analysis and the conclusion with good faith, but "the fact of such disagreement, *even if correct, does not warrant this Tribunal* in treating the University of California Report (UC Report) as part of a political sham by California."<sup>302</sup>

In the same vein, the *Glamis* tribunal specified that the review was valid and evidence of state's legitimate concerns since it was:

Undertaken by qualified professionals who provided their reasoned and substantiated opinions upon which respondent was justified in relying, and was not harmed by bias or prejudice. In addition, the conclusion of the cultural review culminating in direct recommendation to the secretary of Interior was not manifestly arbitrary, a gross denial of justice, or exhibiting a manifest lack of reasons.<sup>303</sup>

In 2001, after six years of study, the Interior Department formally denied the project on the basis that it was within a Native American spiritual pathway that extended 130 miles, and that the proposed mining activities would impair the ability of the Native Americans to travel this pathway.<sup>304</sup> Subsequently, the state of California adopted legislation and administrative regulations that mandated the backfilling of all open pit mines to near the original surface elevation of the site.<sup>305</sup> The investor argued that the

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<sup>299</sup> *Id.* Para. 219.

<sup>300</sup> *Id.* para.101.

<sup>301</sup> *Id.*

<sup>302</sup> *Id.*

<sup>303</sup> *Glamis*, supra 56, Para 24 award

<sup>304</sup> *Id.* Statement of Defense, (*Glamis* Statement of Defense), 8 April 2008. Paras. 11-12.

<sup>305</sup> *Id.* Paras. 166-183.



project had to be considered as being against these laws. It claimed that the cultural review in the EIA was in violation, and that the project “must be approved” if it is in compliance with the National Historic Preservation Act (“NHPA”). Also, regarding the fact that cultural resources were damaged, investor argued that “it wouldn’t have mattered if a wholly new ... significant cultural resource were found at that site[;] under the law as applied [the] Imperial Project was entitled to approval.”<sup>306</sup> The tribunal responded to this argument by explaining that:

If the claimant thinks that the interpretation<sup>307</sup> was incorrect the proper venue would have been the domestic court and emphasized that its role is only to determine whether the disputed review occasioned “a gross denial of justice, manifest arbitrariness, blatant unfairness, a complete lack of due process, evident discrimination, or a manifest lack of reasons.”<sup>308</sup>

Regarding the duty of due process, the tribunal asserted that “the unlawfulness of an action according to municipal law will not necessarily entail a violation of international law”.<sup>309</sup> The tribunal further advised that it could only decide on a breach of FET if the claimant could prove that the process was “so unusual and non-transparent as to be manifestly arbitrary and completely lacking in due process”,<sup>310</sup> and that:

It is not the role of this tribunal, or any international tribunal, to supplant its own judgment of underlying factual material and support for that of a qualified domestic agency. Indeed, our only task is to decide whether Claimant has adequately proven that the agency’s review and conclusions exhibit a gross denial of justice, manifest arbitrariness, blatant unfairness, a complete lack of due process, evident discrimination, or a manifest lack of reasons so as to rise to the level of a breach of the customary international law standard embedded in Article 1105.<sup>311</sup>

The tribunal noted that although the methodology had “never been previously used and was specifically designed and utilized for the Imperial Project”, the respondent “supplied substantial evidence” that their concerns were genuine.<sup>312</sup>

This line of reasoning could be compared with the *Bilcon* decision in the previous section concerning environmental issues being addressed within the context of investment regime. While both cases recognised the importance of protecting indigenous people (in Glamis) and environmental protection (in Bilcon), the latter, failing to recognise the main concerns, subordinated the environmental protection

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<sup>306</sup> Glamis Award, para. 636

<sup>307</sup> In this dispute the “M.opinion”.

<sup>308</sup> *Id.* para. 762.

<sup>309</sup> *Id.* para. 770.

<sup>310</sup> *Id.* para. 771.

<sup>311</sup> *Id.* para.779.

<sup>312</sup> *Id.* para.782.

indirectly. The tribunal could have exercised its power to review the methodology that the panel had adopted. Being familiar with the importance of environmental protection, it could have taken into account the very necessary elements of environmental management, and instead of deciding based on unfamiliar methodology, could have reviewed the genuineness of the report. This example demonstrates how unpredictable the outcome of the disputes can be, even when considering similar claims.

The *Chemtura* tribunal viewed the measure differently when determining the treaty violation, and played a rather active role. When determining if the treatment by the host states was in accordance with the minimum standards, the tribunal further stated that it was not an “abstract assessment circumscribed by a legal doctrine about the margin of appreciation of specialized regulatory agencies. It is an assessment that must be conducted *in concreto*.”<sup>313</sup> Moreover, tribunal commented on its authority to review the measure by contending that its role “is not to second-guess the correctness of the science-based decision-making of highly specialized national regulatory agencies”.<sup>314</sup> When reviewing the legitimacy of the decision, the tribunal first assessed whether the review was conducted in such a manner as to reflect *bad faith* on the part of the Pest Management Agency (PMRA) with the burden of proof being on the claimant.<sup>315</sup> If it was found to be in good faith, the tribunal would have further assessed whether the review had breached the due process rights of the claimant.<sup>316</sup> In its findings the tribunal stated that the review was undertaken under PMRA mandate, and was a result of Canada’s international obligations.<sup>317</sup> Moreover, the conduct was prompted by *international commitments*, therefore the allegation of bad faith as the motivation for launching the review was dismissed.<sup>318</sup> The tribunal was further comforted by the conclusion of expert witness, which “confirmed that the conclusions were within acceptable scientific parameters”. The tribunal referred to this as additional confirmation that scientific divergence does not serve as a basis for finding of breach of article 1105.<sup>319</sup>

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<sup>313</sup> Chemtura Award. Supra 80.

<sup>314</sup> *Id.* Para. 134.

<sup>315</sup> *Id.* Para.137.

<sup>316</sup> *Id.* Para. 145.

<sup>317</sup> *Id.* Para. 138.

<sup>318</sup> *Id.* Para. 143.

<sup>319</sup> *Id.* Para.154.

The final aspect is the approach taken when specifying whether **expropriation** has taken place. This approach is evident in a well-known statement given by the *Methanex* tribunal:

A non-discriminatory regulation for a public purpose, which is enacted in accordance with due process and, which affects, inter alios, a foreign investor or investment is not deemed expropriatory and compensable unless specific commitments had been given by the regulating government to the then putative foreign investor contemplating investment that the government would refrain from such regulation.<sup>320</sup>

On June 15, 1999, Methanex notified the United States of its intention to seek damages under NAFTA.<sup>321</sup> Methanex's 1999 statement of claim identified the ban on MTBE as a "measure" that violated the NAFTA's Article 1105 minimum standard of fair and equitable treatment.<sup>322</sup> Without asserting a loss of physical property, Methanex also claimed the California measure was "both directly and indirectly tantamount to an expropriation" under Article 1110 because it substantially diminished the value of Methanex's investments in the United States for the sale and production of methanol.<sup>323</sup>

Thus, the tribunal's determination that the ban was not expropriatory was based on its conclusion that the regulation was one of general application, in the public interest, scientifically justified, and accomplished with due process. As such, the tribunal concluded, "the California ban was a lawful regulation and not an expropriation."<sup>324</sup>

In the *Glamis* case, the investor claimed that the regulatory measure that mandated backfilling of the mining projects imposed huge costs on the project that made it economically unfeasible, which is tantamount to expropriation, and was a violation of investment obligations. However, the tribunal did not find it to be an expropriatory measure, and stated that the "investor still formally possessed its mining rights and could exploit mineral resources at a profit, albeit under changed circumstances".<sup>325</sup> The tribunal considered in any event that:

The measures challenged by the Claimant constituted a valid exercise of the Respondent's police powers. As discussed in detail in connection with Article 1105 of NAFTA, the [Pest Management Regulatory Agency of Canada] took measures *within its mandate, in a non-discriminatory manner, motivated by the increasing awareness of the dangers* presented by Lindane for human health and the environment. A measure adopted

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<sup>320</sup> Methanex Award, Part. IV, Ch. D, para. 7.

<sup>321</sup> Methanex First Partial Award, para. 24.

<sup>322</sup> Methanex First Partial Award, Para. 78.

<sup>323</sup> *Id.* Para. 83.

<sup>324</sup> *Id.* Pt. IV, Ch. D]. para. 15.

<sup>325</sup> *Id.* paras. 353-536.

under such circumstances is a valid exercise of the State's police powers and, as a result, does not constitute an expropriation.<sup>326</sup>

Finally, the *Chemtura* tribunal indicated that the interference by the government had not been substantial, and therefore the measure was not an example of expropriation.<sup>327</sup> It separated the contractual deprivation and the claim for expropriation, and declared that the measure constituted a valid exercise of the respondent's police power, "irrespective of the existence of a contractual deprivation". Moreover, the following measure was taken:

Within the mandate, in a non-discriminatory manner, motivated by the increasing awareness of the dangers presented by Lindane to human health and the environment. A measure adopted under such circumstances is a valid exercise of the State's police power and, as a result, does not constitute an expropriation.<sup>328</sup>

Although this analysis has covered most of the important investment decisions with environmental components, the concerns are not only limited to these disputes. As explained in the beginning of this chapter, the analysis of an award would exclude disputes that did not reach the merit phase, due to the tribunal's lack of jurisdiction, settlement or being still pending. Looking at the variety of claims that the investors have made could however further elaborate and support the argument that tribunals need to make adjustments in their approach, which ultimately informs their interpretation of treaty provisions. This could help tribunals to accommodate the surge of alleged violations for environmental protection, and could enable them to reach a decision that embraces the purpose of investment regimes as a regime under the international law.

### 2.3 Analysis

Analysing the most important environment-related investment disputes revealed inconsistencies in tribunal's approaches towards environmental considerations. This problem could have an adverse impact on a state's confidence to take actions for effective environmental protection, due to the unpredictability of the outcome.

Three different approaches were discussed. Although the first approach (finding environmental concerns irrelevant) is less likely to surface again, the second approach is more probable, and occurred in the *Bilcon Delaware* case. While the third approach puts the environment in motion and rejects the investors' claims, it does not contribute to consistency and predictability for the parties involved, as it does not provide an

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<sup>326</sup> *Chemtura Award*. para. 266.

<sup>327</sup> *Id.* Para. 263.

<sup>328</sup> *Id.* Para. 266.

objective test. For instance, the *Chemtura* case was an example of a precautionary decision, although the principle was never mentioned, but it cannot be regarded as an objective test. All of the elements the tribunal addressed could be condensed in the precautionary test, which will be introduced under the analytical framework of this research.

Basically, investors can claim a violation of almost every treaty standard, hoping that at least one aspect could help them win. Having a framework would allow the investors to understand what to expect and how plan their business around those issues. It would allow them to be more prudent in their assessment and business decisions, to include community opinions, to negotiate the terms of their contracts more carefully, to request assurances more reasonably through valid sources, to conduct due diligence before going forward with host states' encouragements, and so forth. They could better evaluate their options by acknowledging that environmental policies are constantly changing to address upcoming concerns. Investors, and host states are both affected by the inconsistency and unpredictability of the awards. Their resources and long-term business plans are at stake. Therefore, increased predictability in the system would benefit them both. Tribunals have been inconsistent regarding several issues that have been, and will continue to be, raised in all environmental disputes. Until this understanding is settled, and the tribunals' perception of the nature of the problem is not amended, other solutions cannot be practical. Tribunals are the ones who decide at the end whether the laws apply to the facts. The areas of inconsistent decisions are:

*Expropriation:*

In general, expropriation occurs in environment-related investment disputes when a host state promulgates a decree or resolution targeting a specific area that is owned, and is under the operation of a foreign investor (e.g. Santa Elena). Alternatively, the target could be an area that comprises the entire project, with the property being taken for the purpose of environmental protection. There is a consensus among all tribunals that if an investor's property is taken directly, expropriation has taken place and the host state should pay compensation. However, a predicament arises when regulatory taking occurs, which is a concept reflected in the references to actions 'tantamount to expropriation' in modern investment treaties.<sup>329</sup> In the context of environment-related investment disputes, this refers to cases where the investment has been affected as a

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<sup>329</sup> Thomas Waelde and Abba Kolo, 'Environmental Regulation, Investment Protection and "Regulatory Taking" in International Law', *International and Comparative Law Quarterly*, 50.4 (2001), 811–48 (p. 848).

result of a measure taken by the state to protect the environment. If it has had an impact similar to if the property had been completely taken, it is considered as expropriation. The tribunals do not seem to have reached a consensus on this issue. Some tribunals have considered this type of measure as indirect expropriation, focusing on the extent to which the property was affected (*Metalclad*). Others, however, have ruled that if a measure was genuinely intended to protect the public interest, and was adopted according to due process, it is not expropriation. Instead it represents a legitimate act of the state, regardless of economic losses (*Methanex*). In *Marion Unglaube vs. Costa Rica*, however, the tribunal divided the project into different phases, and instead of looking at the project as a whole, decided that the zoning decision had affected the last phase. The tribunal therefore considered the last phase as being regulatory expropriation. This lack of consensus, and difference in interpretations of one concept, would increase the uncertainty for the states when making decisions to protect the environment. Considering the amount of compensation that the government might be charged, this could make the receiving states reluctant to take measures to protect the environment.

It has been argued that regulatory expropriation occurs and compensation is owed only in extreme cases. This happens when the economic value of the investor's property is completely and indefinitely destroyed, or if the investors are required by regulation to make a special sacrifice in terms of their proprietary rights for environmental protection purposes.<sup>330</sup> According to Waelde and Kolo, this is a fair outcome, since compensation is the price that the community should pay the investors if they are to bear a 'special and exorbitant sacrifice' for the society.<sup>331</sup> In other words, if the environmental protection completely destroys the economic value of an investor's property, the fair solution is that society pays for having the environment protected. Be that as it may, this all depends on how the tribunal interprets the concept, and on which approach they take. This research, by looking into the peculiarities of environmental regulation, through principles of environmental law, provides a context against which tribunals could make more informed decisions, and could assess the environmental measures against an objective benchmark.

#### *Fair and Equitable Treatment:*

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<sup>330</sup> *Id.* p. 846.

<sup>331</sup> *Id.*

FET is the main investment provision that has been used by investors to claim for damages imposed by changes in law or adaptation of measures in the host state, for environmental protection purposes. In some instances, the foreign investors have argued that the breach of FET has had such an effect on the investment that they have completely forfeited their benefits. In one instance, the investor argued that the ‘requirements for environmental remediation were so hard to achieve that it caused bankruptcy to the investor since the project could not be operated in bankruptcy’.<sup>332</sup> In *Pac Rim Cayman v. El Salvador*, the investor claimed that the opposition of the municipality to the granting of new mining permits had imposed costly and time consuming effects on the mineral exploration process. The investor claimed that it had been deprived of its substantial and long-term investment, and that its rights in El Salvador had been effectively destroyed. The investor therefore asserted that the government breached its obligations.<sup>333</sup>

One of the most important aims of this research is to influence the tribunals’ perception of environmental regulation, which also has implications for investors’ general expectations of the states. If the processes and elements of environmental regulations were clear to the investors, some of these arguments would have never been raised (knowing that they had no basis), or the grounds for the claim would have been different. In other words, if the investors had expected that the environmental laws and policies would constantly change, and that some of these changes might have had economic consequences, then their focus would not have been on the changes in policy and regulations. Instead they would have focussed on the processes, and on whether the host state had met the criteria for an acceptable environmental measure. This study will put forward a list in the format of questions that will lead to a deeper understanding of monitoring activities to prevent environmental damages in the future.

In some recent decisions, the investors claimed that the breach of their legitimate expectations has led to the breach of treaty obligations. In some of these cases, the tribunals held that an ‘intelligent and experienced investor is supposed to expect that there will be changes in the environmental laws’<sup>334</sup> or even that it is ‘foolish’ to expect a stable system.<sup>335</sup> The tribunals also state that the investor’s expectations should include

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<sup>332</sup> *The Renco Group, Inc. v. The Republic of Peru*, ICSID Case No. UNCT/13/1, Notice of arbitration, Aug 9, 2011, para. 6.

<sup>333</sup> *Pac Rim Cayman LLC v. Republic of El Salvador*, ICSID Case No. ARB/09/12, Apr 30, 2009.

<sup>334</sup> Marion Unglaube, *supra* 293.

<sup>335</sup> *Parkerings*, *supra* 297.

the fact that the law would not freeze.<sup>336</sup> Although these recent awards are promising, and demonstrate awareness by the tribunals of the peculiarities of the environmental regulations, there is no consistent pattern. Some tribunals did not share the same opinion, and held that the foreign investors should expect the states' actions to be conducted in a steady manner, with no changes in relevant regulation or supervision. At the least these tribunals held that the investor should be exempted from these changes, based on an investment treaty. The tribunals stated that states have an obligation 'to provide to international investments treatment that does not affect the basic expectations that were taken into account by the foreign investor to make the investment'.<sup>337</sup> While fair and equitable treatment is a sensible concept, again the difficulty arises when tribunals have to assess the measure and identify whether an unfair treatment had occurred; this can be an extremely subjective judgment.

Being considered as expropriation or standing alone as a breach of FET, it is necessary to determine what investors should expect (from the environmental protection and governance perspective) when they commence their activities in a country. Although some tribunals have approached the expectations reasonably, many have based their decision on the expectation that the investors' claimed, such as the claims raised in *Bilcon* case. This inconsistency will add to the uncertainty on both sides regarding what expectations the investors should have.

The first two points provide a context in which other issues could be discussed and located. The idea is to review some elements that have influenced the tribunal's decision to find a measure expropriatory or breach of FET. Consequently, this chapter will conclude by stating that each of the issues that have been relied upon to declare a breach of investment treaty has a special weight and meaning in the field of environmental protection and decision making. This will link to the next chapter, which explores different mechanisms of environmental decision-making.

#### *Community opposition:*

Most environment-related investment disputes include, or are mainly triggered by, community and local opposition. Protests occur due to the local communities' disapproval of the specific project, which might affect or threaten their environment. Governments might take measures as a direct response to such opposition, or the

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<sup>336</sup> Palma, *supra* 298.

<sup>337</sup> Tecmed Award, *supra* 45. para. 154



opposition might raise the awareness of the government, leading to further investigation into the issue or a change in their policies. The argument by foreign investors in this respect is that the opposition of the locals had motivated the main trigger behind the changes in the environmental policy or measure. Therefore, these measures are not legitimately and genuinely intended to protect the environment, but are mainly designed to simply put an end to the protests.

Tribunals have adopted several different approaches to this argument. While some have accepted the foreign investor's argument, and held that a measure was not genuinely intended to protect the environment (Metalclad, Tecmed), others have assumed that the local opposition represented legitimate grounds for taking action (Unglaube).

As will be further explained in the chapter three, it is important to comprehend the peculiarities and fundamental elements of environmental regulation and protection. In fact, communities are the first to be affected by the potential or actual damage of an activity, and a responsible government is expected to respond and take action if there is a risk of potential harm to their environment.

#### *Permits:*

The permit system is one of the most important aspects of environmental regulation and supervision. Certain projects are required to obtain certain permits and licenses before they start their activity, due to the potential adverse impacts they might have on the environment. In the majority of environment-related investment disputes, foreign investors have disputed the ways in which the host states treated the permits, and have argued that the states' actions were in breach of FET, or in some cases were expropriatory.

On some occasions, a host state might not give the requested permit to an investor to start up their activity. This might cause them to lose some or all of their profits, or they might start the project regardless of the permits being denied by negotiating some alternative ways and obtaining assurances from other officials in the government.<sup>338</sup> These permits could concern operation, construction, exploitation or environmental issues. The focus of this argument is any denial of these permits by the government that occurs directly or indirectly as a result of community opposition. One could argue that unless all the permits are not obtained, the environmental-related in particular, the investment is not established as such. Therefore, the foreign investor

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<sup>338</sup> Metalclad, supra 55.

should not be allowed to commence the development, regardless of any assurances it has obtained separately from other officials. On many occasions, a permit was revoked by the host state (federal or municipal) because of a breach from the investor's side, or because of the changes in the law triggered by environmentally harmful behaviour from the investor.<sup>339</sup> In some cases the foreign investors challenged these actions, and claimed they were a breach of the FET. Investment disputes are not about investor's obligation, but rather their business conduct. This still needs to be taken into account when defining investor's legitimate expectations however, particularly when it is not in conformity with a host state's environmental policy. Finally, in some cases a permit was granted for a certain period of time, was and subject to periodic renewal. Investors must be aware of a permit's nature when applying for it, and cannot expect to be granted new ones unless they follow certain requirements. In addition, there might be changes in the environmental law that make their activity unreasonable for permit renewal.

Although all of these measures have the potential to be used as pretext, the burden of proof should be on the investors to demonstrate that the measures have not been legitimate. As will be mentioned in the chapter three, issuing permits is one of the most common means of supervision of the impact of the project on the country, and allows the host state to prevent future harm in case of any malfunction of the business, or changes in environmental policies.

#### *Assurances:*

Assurances are the promises that foreign investors acquire from officials (mainly federal when there is a risk of municipality opposition to the project), and are separate from the licensing and permit process. In some cases they appear in the form of an agreement or Memorandum of Understanding. Foreign investors invoke these assurances as a shield to protect against any changes to the laws and any future measures. Tribunals have adopted divergent views in this regard. Some consider the assurances as a promise by the governments, so that the breach of an assurance would result in a breach of FET (Metalclad & Methanex). Others tribunals however have ordered that the burden of proof is on the foreign investor to demonstrate that the promise or the assurance was the "final approval" of the project, otherwise it is not considered as a breach of the investment treaty obligations.<sup>340</sup>

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<sup>339</sup> Tecmed, *supra* 70.

<sup>340</sup> Marion Unglaube, *supra* 295.

These statements are important when the issue at stake is the environmental impact of the projects. This is due to the fact that the projects with potential adverse environmental impacts have to obtain certain environmental or construction permits. Recognising assurances as being a state's approval might facilitate a trend in which some investors find it more convenient to bypass the permit process -sometimes the municipality- and obtain an agreement or assurances from the federal government or other agencies (who are not directly dealing with the process). Following this path, there is a risk that the investors might be able to use the assurances to breach investment treaty obligations.

*Least restrictive (consistent with trade and WTO standards):*

In some cases, investors have challenged the type of measures that the host state has adopted and have argued that the government should have chosen the least restrictive measure (regarding the investor) when protecting the environment (if that is the genuine purpose).<sup>341</sup> Some tribunals have accepted this argument based on the WTO standard, and have held that measures should be taken in a way that is consistent with trade and does not jeopardise the economic interests of the investor. On the other hand, Methanex raised the same argument but the tribunal did not consider an alternative option. They instead deferred to the government to choose what was necessary to protect their public interest.

Allowing the least restrictive measure would prioritize economic interests over other concerns such as environmental matters. The main purpose of the WTO is ensuring the flow of free trade and preventing trade barriers. The main purpose of investment law and BITs however, is to protect foreign investors against the hostile actions of the host states. It doesn't aim to prioritize their rights over the general practice of the states (protecting their public interest), which might have some impact on the investors. The different approaches adopted by tribunals might result in uncertainty from the host states when making the right choice regarding a potential risk to the environment.

*International environmental obligations:*

As environmental concerns are growing, so are the international obligations of states. When a state adopts a measure to comply with its international obligations, this is not necessarily a sign of conflict. If the tribunal considers this situation to be a conflict, which it did in the SD Myer case, the only solution would be trumping one obligation

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<sup>341</sup> SD Myer, supra 60.

for the benefit of the other. This approach is not consistent with systemic integration in international law, or the assumption that the laws and treaties all work together. It could also prevent states from subscribing to or complying with the international programmes for environmental protection, for fear of breaching investment treaty obligations. On the other hand, the tribunals might consider the international obligations and treaties as evidence of concern over a particular issue (a ban on a chemical, for example), and therefore a basis for legitimate regulation. This would guarantee the integration of the international law systems, and would also allow states to make a balanced decision to protect their public interest while complying with all international obligations. This approach was adopted in the *Chemtura* decision, where the tribunal considered that the wide international movements to ban a certain product was evidence of legitimate environmental regulation, and therefore the state banning that product was not a treaty violation.

*New wave of claims:*

Global environmental awareness has not only failed to cut the myriad of complaints against states' environmental measures, but rather has resulted in a new phase of disputes. Therefore, the measures have been adopted by questioning the technical basis of the decisions, not because of this new wave of assertions by investors. This means that the common responses by the host states are insufficient (protection of public interest, police power, deference, etc.), and so the tribunals face a more complex and technical dispute. Therefore, police power and the protection of public interest cannot respond to the technical challenges that the investors are putting forward. There is an urge to clarify how these challenges are being answered and what approaches the tribunals should adopt. Below are some instances of the investors presenting technical arguments.

*a. Rejecting the scientific basis of the measure:*

On several occasions investors have pointed to the study behind the environmental measure by challenging its framework, the process, or by claiming that the entire scientific basis is flawed. They either claim that the measure has no scientific basis or that there is no conclusive scientific evidence.<sup>342</sup>

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<sup>342</sup> Methanex, supra 77.

*b. The Environmental Impact Assessment (EIA):*

The EIA plays an extremely important role in environmental regulations, and as will be explained in the chapter three, is the key instrument in anticipating the potential adverse impacts that a particular project might have on the environment. The EIA determines the measures taken to manage or eliminate those risks. In general, the party who is proposing to begin a project with a potential environmental impact should conduct the EIA, and the government authorities will then assess the EIA study. If the host state considers the study to be insufficient, they request modification or a further study from the investor. This process is the regular and routine practice of environmental governance and supervision. Having this background in mind, in different cases investors have questioned the EIA as being discriminatory conduct on behalf of the states, as it is not required for all projects. In one instance, the investor argued that they failed to secure financing because of unnecessary and time consuming environmental requirements (environmental remediation plans or EIA in particular), and therefore entered into involuntary bankruptcy. Moreover, in some disputes the investors have argued that delays in the assessment of the project have been unnecessary, discriminatory and have been a breach of FET and due process. They did not consider the elements that might affect the assessment, for instance the size, location and particular activity that was aimed at the project.

*c. Proving legitimate concerns or scientific basis:*

Where is the threshold and what is the standard of review? Does the tribunal stop when they are satisfied that the measure is not a political sham (Methanex), scrutinize the scientific evidence to find flaws (Chemtura) or do they only consider due process?

*Election and the Green party:*

Investors have raised other common points (with regard to the environmental measures) that political the motivations behind the measures have also directly or indirectly affected their business. A common example is where the investor starts the business when the current government is more focused on trade and economic development. Fewer trade and investment restrictive measures are adopted, and the government issues permits and allows the business to go on. The problem starts when a 'green' party wins the election, or a newly elected governor has promised to deal with the local community's environmental concerns (Vattenfall II v. Germany). The newly elected authority will prioritize the environment, or will have environmental issues on its

agenda, and take actions accordingly. While legitimate concerns are involved, it is important to define to what extent states could be held responsible by changing priorities, and whether the investors should expect changes.

*Chilling effect:*

Regarding the impact of an investment regime on environmental governance, some commentators have suggested that there is more controversy on scholarly writings than the decisions.<sup>343</sup> They suggest that the current trend in decision-making is not a threat to the host states, or their flexibility to regulate the environment. Consequently, there has not been any disaster so far in the arbitral decisions, however ‘the risk is there’.<sup>344</sup> The problem with this statement is that these interpretations might considerably change the outcome of the decisions. In fact, the investment regime does not require many adverse decisions to affect the regulatory power of poor governments.<sup>345</sup> While investment disputes may not bankrupt developed countries, developing countries may not have the power or money to stand up to rich corporations, and are more likely to accept an investor’s demands by withdrawing or abandoning the regulatory measures, without even going to arbitration (‘regulatory chill’). However, this problem is not restricted to developing countries. Developed countries could also confront this dilemma if they are concerned about their international reputation for investment friendly policies, or on the other hand if protecting the environment is one of their longstanding goals.

Susan Frank has conducted an empirical study on the investor-state cases. She suggested that developing countries do not disproportionately “lose” under the investment arbitration regime, and despite all controversies it is a fair regime.<sup>346</sup> It is important to note however that fairness is not the main concern over investment dispute settlement regimes, but rather the repercussions that they might have on a state’s regulatory power. Some have criticised Frank’s work by stating that her conclusion cannot be supported by a case study in the investment regime, due to the lack of sufficient cases.<sup>347</sup> Many conflicts between foreign investors and the host states will never reach the arbitration

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<sup>343</sup> David MacArthur, ‘NAFTA Chapter 11: On an Environmental Collision Course with the World Bank’, *Utah Law Review*, 2003 (2003), 913.

<sup>344</sup> Rudolf Bernhardt, ‘Questions for Mark Clodfelter and David A. Gantz’, *South Texas Law Review*, 42 (2001), 1303.

<sup>345</sup> MacArthur.

<sup>346</sup> Susan D Franck, *supra* 87, p. 1.

<sup>347</sup> Kevin P. Gallagher and Elen Shrestha, ‘Investment Treaty Arbitration and Developing Countries: A Re-Appraisal’, *The Global Development And Environment Institute*, Working Paper 11-01 (2011).

stage due to its high cost, and the high risk for both the host state and the investor.<sup>348</sup> It has been argued that investors hope that they can change the attitude of the government and the measure that it has adopted by simply raising the intention to file a dispute under treaty provisions as a threat.<sup>349</sup> Some even consider arbitration to be used as ‘an offensive weapon to harass or intimidate’. Even Walde, one of the lead pro-investor scholars, stated that the impact of the arbitration clause is “...an implicit threat to both parties rather than its actual use”.<sup>350</sup>

The question remains whether investment tribunals have been provided with the tools necessary to deny unmeritorious claims for compensation arising from legitimate environmental measures. The question also remains as to whether they can identify cases where environmental policy is being used as little more than a shield to obscure the arbitrary or discriminatory treatment of a foreign investor. This analysis will lead into the chapter three, which explores environmental regulation and introduces the precautionary principle as the analytical framework. This principle is one of the most effective mechanisms to monitor environmental protection. Its objective is to provide a benchmark for an acceptable environmental measure, based on the modern environmental decision-making process, which has been accepted by states according to the numerous environmental instruments. This would allow tribunals to objectively assess the measures to find a breach of investment provisions or reject an investor’s claims.

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<sup>348</sup> Tienhaara, p. 217.

<sup>349</sup> Howard Mann, ‘Assessing the Impact of NAFTA on Environmental Law and Management Processes’ (presented at the North American Symposium on Understanding the Linkages between Trade and the Environment, Montreal, 2000), p. 175  
<<http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.7.8052>> [accessed 24 April 2011].

<sup>350</sup> Thomas Waelde, ‘Law, Contract and Reputation in International Business: What Works?’, *CEPMLP Online Journal*, 1998, 3–18.

### 3 Analytical Framework

#### *The Precautionary Principle*

#### *3.1 Introduction*

The previous chapter reviewed environment-related investment disputes to find a pattern in the way tribunals approach environmental concerns (as the trigger of disputed measures). It was concluded by cataloguing certain elements that have had a bearing on tribunals' reasoning in finding violations in investment provisions. These elements include some concepts, tools and methods that have particular meaning in the field of environmental regulation and supervision. The argument is that if these elements are not taken into account by the tribunals then their interpretation of the investment provisions would be incomplete. For instance, in deciding whether an environmental policy adopted by a host state has been unfair, against expectations, or a breach of due process or discriminatory, the tribunal needs to deconstruct that policy and understand its elements.

The scope of this thesis does not cover the study of environmental regulation in detail, just enough to introduce the precautionary principle as an analytical framework. The first part of this chapter briefly explains the environment and its peculiarities; a topic that requires on-going scrutiny and complex decision-making by states and authorities to prevent environmental harm. This includes changes in the environmental regulation and supervision to address current concerns and shifting approaches, towards a more comprehensive way of managing environmental risks. This introductory section on environmental regulation sets the stage for introducing the precautionary principle as the analytical framework for this thesis.

The principle has been chosen as the analytical framework, or in other words, as a lens through which the issues surrounding the environment-related investment disputes will be addressed. It has, however, been the subject of constant debate inside and outside academia over its application and legitimacy. Therefore, it is not an uncontested tool to be applied to resolve the identified issues. The principle requires some analysis and exploration before considering its application by investment tribunals. Thus, it is necessary to establish its core meaning and status under international law and study its appropriateness as an applicable tool. Only then would it be possible to apply the



principle to investment tribunals in addressing the environmental concerns of host states.

### 3.2 *Environment and risk regulation*

The answer to the question of how the environment is regulated is a multifaceted one. According to Hey, ‘writings in the field of international environmental law which are strictly limited to the plain state of the law read much like novels from which the editor has deleted every second and third paragraph’.<sup>351</sup> The peculiarities of the environment and natural system have attracted special attention from governments and international communities. Several incidents have suggested that the stakes are much higher than 10-20 years ago.<sup>352</sup> The unique characteristics of environmental issues include aspects such as the complexity and irreversibility of the environmental risks, the cumulative and interactive effects within the ecosystem and the indirect and its unquantifiable impacts.<sup>353</sup> Moreover, by adding human interaction to the picture, the outcome becomes even more complicated.<sup>354</sup> These complications include new possibilities offered by rapid technological development, human action causing environmental damages, recognition of the ecosystem’s sensitivity<sup>355</sup> and interdependence and also our limited understanding of natural process. On the other hand, the common risk governance methodology and the problems of using quantitative risk assessments to estimate the hazards threatening the environment are some of the most important challenges that the authorities are now facing. In particular, there is an issue with the disunion of value and science, which is reflected in the process of risk assessment and risk management.<sup>356</sup> Thus, the unpredictability, variability, vulnerability and complexity of environmental

<sup>351</sup> Quoted from Ellen Hey in Arie Trouwborst, *supra* 117, page 10.

<sup>352</sup> European Environment Agency, *Late Lessons from Early Warnings: The Precautionary Principle 1896-2000* — EEA (Copenhagen, 2001) <[http://www.eea.europa.eu/publications/environmental\\_issue\\_report\\_2001\\_22](http://www.eea.europa.eu/publications/environmental_issue_report_2001_22)> [accessed 4 April 2011]; European Environment Agency (EEA), *Late Lessons from Early Warnings: Science, Precaution, Innovation* (European Environment Agency (EEA), 23 January 2013). Issues such as: Pollution, global warming, waste disposal, climate change and the role of fossil fuels in altering atmospheric chemistry, loss of biodiversity, deforestation, ocean acidification, Ozone layer depletion, acid rain, etc.

<sup>353</sup> Sunstein, ‘Two Conceptions of Irreversible Environmental Harm’.

<sup>354</sup> Wybe Th. Douma, ‘The Precautionary Principle’, appeared under the same title in the Icelandic legal journal *Úlfjótur*, 1996, Vol. 49, nrs. 3/4, p. 417-430, accessed at < <http://www.asser.nl/upload/eel-webroot/www/documents/Dossiers/PrecautionaryPrinciple.pdf>>.

<sup>355</sup> On ecosystem approach see: *Convention on Biological Diversity*, Article 2; *Fifth Meeting of the Conference of the Parties to the Convention on Biological Diversity*, Nairobi, Kenya, 15 - 26 May 2000, Decision V/6.; *UN World Summit on Sustainable Development*, Johannesburg, South Africa, 26 August-4 September 2002 in which States committed to promote the sustainable development of marine ecosystems. More specifically, States encouraged the application of the ‘ecosystem approach’ by 2010, and promoted integrated, multisectoral, coastal and ocean management at the national level.

<sup>356</sup> Marko Ahteensuu, ‘The Precautionary Principle in the Risk Management of Modern Biotechnology’, *Science Studies*, 1 (2004).

effects are judged to warrant a prudent approach.<sup>357</sup> To understand the materialization of precautionary thinking, it is important to briefly mention the gradual adjustments that have been made, and are still ongoing, as a response to developments in the understanding of the environment's vulnerability and the ineffectiveness of previous methods.

In general, there are three different approaches to protecting the environment, namely, curative, preventive and anticipatory.<sup>358</sup> The curative approach recognizes natural resources to be exhaustible; they cannot survive without assistance. The representative instrument to this approach is the polluter-pays principle: Principle 16 in the *Rio Declaration*. The polluter-pays economic approach promotes the internalization of environmental costs and the use of economic instruments to implement the principle.<sup>359</sup> It focuses on governments using a command and control strategy to control sensitive activities, particularly emission-sensitive developments, to internalize their costs. However, even in this purely compensatory approach towards environmental damages, it has been argued that the direction of companies' behavior should change from a 'purely burden changing polluter-pay to a more preventive one'.<sup>360</sup>

The second approach involves reducing the amount of damage that might be caused to the environment. In accordance with the Charter of United Nations and international law, states have a responsibility to ensure that activities within their territory do not cause environmental damage to the territories of other states. This responsibility is included in the Stockholm Declaration, and is considered as the 'golden rule of international environmental law'.<sup>361</sup> The preventive principle is used to avoid and control transboundary harm, for instance; it has to be based on a certain level of scientific knowledge, meaning that the threat of harm needs to be established convincingly before taking steps towards preventing it. The prevention principle responds well to the notion of risk, where the negative outcome of a potential harm to the environment can be assessed. However, following an increase in awareness towards

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<sup>357</sup> Arie Trouwborst, *Precautionary Rights and Duties of States* supra 119, p. 5.

<sup>358</sup> Malgosia Fitzmaurice, *Contemporary Issues in International Environmental Law* (Edward Elgar Publishing Ltd, 2009), p. 3.

<sup>359</sup> OECD recommendation on Implementation of the Polluter-Pays Principle. C (74) 223/Final (OECD, 1974).

<sup>360</sup> Priscilla Schwartz, 'Principle 16: The Polluter Pays Principle', in *The Rio Declaration on Environment and Development: A Commentary*, ed. by Jorge E. Viñuales (Oxford, United Kingdom: OUP Oxford, 2015), pp. 429–50 (p. 429).

<sup>361</sup> Nicolas de Sadeleer, *Environmental Principles: From Political Slogans to Legal Rules* (Oxford University Press, USA, 2005), p. 89.

environmental issues it has emerged that the consequences of some activities cannot always be assessed in advance and this uncertainty cannot be used by states as a justification for inaction.<sup>362</sup> Hence, an ex-ante approach towards environmental management is required to identify where there is a probability of serious or irreversible harm to the environment. Necessary measure would then need to be adopted to prevent it, even if the science is not conclusive.

The anticipatory approach towards environmental problems thus emerged as a response to the complexities of the natural system, and also the inability of science to fully recognise and predict its function.<sup>363</sup> The principle of precaution was introduced as a tool to identify and control environmental threats at source, and prevent them from materializing. It is an extension of prevention, as both principles follow the same logic to prevent harm, however, precaution is more advanced. The ILO described the relationship between these two principles in its 2012 Report:

In EU environmental law, the prevention principle and the precautionary principle are widely understood as elements of one principle, in that they form part of a continuum. Locating a dispute on the precaution-prevention continuum depends on the extent of scientific uncertainty; only when there is very strong scientific evidence will the prevention principle be engaged.... In EU environmental law, the prevention principle and the precautionary principle are widely understood as elements of one principle, in that they form part of a continuum. Locating a dispute on the precaution-prevention continuum depends on the extent of scientific uncertainty; only when there is very strong scientific evidence will the prevention principle be engaged.<sup>364</sup>

De Sadeleer made a clear distinction between the two in his work:

Prevention is based on certainties: it rests on cumulative experience concerning the degree of risk posed by an activity...therefore, prevention presupposes science, technical control, and the notion of an objective assessment of risks in order to reduce the probability of their occurrence. Preventive measures are thus intended to avert risks for which the cause-and effect relationship is already known. ... Precaution, in contrast, comes into play when the probability of a suspected risk cannot be irrefutably demonstrated. The distinction between the two ... is thus the degree of uncertainty, the greater the justification for intervention as a means of prevention rather than in the name of precaution. By contrast, precaution is used when scientific research has not yet reached a stage that allows the veil of uncertainty to be lifted.<sup>365</sup>

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<sup>362</sup> Leslie-Anne Duvic-Paoli and Jorge E. Viñuales, 'Principle 2: Prevention', in *The Rio Declaration on Environment and Development: A Commentary*, ed. by Jorge E. Viñuales (Oxford, United Kingdom: OUP Oxford, 2015), pp. 107–36 (p. 136).

<sup>363</sup> Mehmet Suat Kayikci, 'The Burden of Proof within the Scope of the Precautionary Principle: International and European Perspectives', *Available at SSRN: <http://ssrn.com/abstract=2101613>*, 2012 <<http://papers.ssrn.com/abstract=2101613>> [accessed 26 November 2014].

<sup>364</sup> International Law Association, Committee on Legal Principles relating to Climate Change, 'Second Report' (Sofia, 75<sup>th</sup> session, 2012), 28.

<sup>365</sup> de Sadeleer, pp. 74–75.

It should be noted that despite their similarities, these approaches function in different spheres.<sup>366</sup> Furthermore, adopting the appropriate approach totally depends on a state's level of risk tolerance, and the specific environmental problem at stake. Each government approaches its environmental affairs, makes its own trade-offs and adopts different mechanisms according to its own priorities and objectives.

Before the 1990s, dealing with risk consisted of a two-stage process, namely risk assessment and risk evaluation. The focus was less on *probability*, and more on *conflict*.<sup>367</sup> Risk assessment has since become common practice. Risk assessment was thought of as a reliable practice to control environmental harm until recently; a debate has now surfaced over the objectivity of science in environmental decisions.<sup>368</sup> This debate has resulted in the substitution of the scientific process of risk assessment with a more multi-layered process of 'risk regulation'. This is based on the understanding that the assessment and mitigation of environmental threats is a multilayered process. The managing of uncertain risks is inherently political and cannot be based merely on quantified data. This has resulted in a need to separate risk assessment from risk management.<sup>369</sup> In addition, society has become more risk averse. Ulrich Beck introduced the concept of the 'risk society' in 1992,<sup>370</sup> which suggests that modernity produces more and more uncontrollable consequences. Therefore, society has become risk averse to minimize the harmful consequences of possible environmental harm.<sup>371</sup> Moreover, recent experiences of loss through large disasters, combined with further understanding of the limitations of science in fully detecting environmental hazards, have encouraged governments to adopt more systemic and rigorous methods to

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<sup>366</sup> Jorge E. Vinuales, 'Legal Techniques for Dealing with Scientific Uncertainty in Environmental Law', *Vanderbilt Journal of Transnational Law*, 43 (2010), 437 (p. 437).

<sup>367</sup> Steve Rayner and Robin Cantor, 'How Fair Is Safe Enough? The Cultural Approach to Societal Technology Choice1', *Risk Analysis*, 7.1 (1987), p. 3.

<sup>368</sup> See J. Robert Cox, *Environmental Communication and the Public Sphere* (SAGE publication, 2012); Dr. Marjolein B. A. van Asselt and Prof Dr Ellen Vos, 'EU Risk Regulation and the Uncertainty Challenge', in *Handbook of Risk Theory*, ed. by Sabine Roeser and others (Springer Netherlands, 2012), pp. 1119–36.

<sup>369</sup> Dr. Marjolein B. A. van Asselt and Prof Dr Ellen Vos, 'EU Risk Regulation and the Uncertainty Challenge', in *Handbook of Risk Theory*, ed. by Sabine Roeser and others (Springer Netherlands, 2012), p. 1121. For instance, the changes and reforms in European environmental and health decision making started since the Mad Cow disease controversy.

<sup>370</sup> Roughly at the same time with the United Nations Conference for Environment and Development in which the Rio Declaration and the environmental principles were acknowledged to ensure the effective environmental protection against the risks.

<sup>371</sup> Ulrich Beck, 'The Silence of Words and Political Dynamics in the World Risk Society', *Logos*, 1.4 (2002), 1–18 (p. 19).

mitigate risks.<sup>372</sup> In general, the current idea of risk regulation consists of risk assessment, risk management and risk communication.<sup>373</sup>

In the risk management stage, the aim is to scale the risks and the consequent hazard severity acknowledged at the risk assessment stage. The risks can then be evaluated according to their level of acceptability.<sup>374</sup> The supplementary methods/phases added to risk assessment process are the result of losing faith in science as the single tool for recognizing risks. Many of the supplementary methods and tools that accompany the risk assessment focus on the need to take into account the **values**. However, the focus here is not about value versus science, or values prevailing over science, but rather to demonstrate the distinction between risk assessment vs. management. Risk assessment fails to capture either the delicate relationship between science and values or what is really at stake in risk regulation.<sup>375</sup> The *Commission on Risk Assessment and Risk Management* in 1997 developed recommendations for how the United States Environmental Protection Agency (EPA) should perform risk assessments as part of developing air quality regulations.<sup>376</sup> Evaluating the conventional risk assessment methods, it acknowledged the importance of risk assessment and its contribution to the remarkable progress in reducing health and environmental risks in recent decades. However, the commission recommended that risk assessment is not 'adequate for addressing the more complex risk problems we now face'.<sup>377</sup>

### 3.2.1 Public opinion

Before focusing on the role of science it is important to briefly mention the role of community and public opinion in the current approaches towards environmental management. The previous chapter featured several instances in which foreign investors claimed that the disputed environmental measures were triggered by the public/local protests. Therefore, they claimed that the measure/treatment was political, instead of genuinely for environmental protection purposes. Environmental protection has a very close connection with the local community, and the public in general. In the case of any accident or flaw in a proposed activity, it is the community who pays. Therefore, their

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<sup>372</sup> Keith Smith, *Environmental Hazards: Assessing Risk and Reducing Disaster* (Routledge, 2013). P. 88.

<sup>373</sup> Id.

<sup>374</sup> Smith, 2013. p. 90.

<sup>375</sup> E. Fisher, 'Framing Risk Regulation: A Critical Reflection' (2013) 4 *European Journal of Risk Regulation* p. 125.

<sup>376</sup> As part of a study on the Framework for Environmental Health Risk Management, the *Commission on Risk Assessment and Risk Management* in 1997, authorized as part of the *Clean Air Act Amendments* of 1990.

<sup>377</sup> Gail Charnley, *Framework for Environmental Health Risk Management*, Presidential/Congressional Commission on Risk Assessment and Risk Management, final report (DIANE Publishing, 1997), I, p. 8.

concerns are legitimate, and governments are responsible for them. The serious consequences and externalities for the environment and health turns a private choice into a public decision, which justifies public protests against hazardous activities.

In modern environmental management, there have been heated debates on engaging stakeholders in environmental decision-making, which is a method of soliciting public opinion.<sup>378</sup> This method promises an open debate about what kind of place a society wants to live in, because it creates a discourse between a concerned and activated public and scientific community. It has been defined as the ‘modern environmental movement’. The precautionary Principle has been claimed to be the ‘key catalyst in the renegotiation of the appropriate role of science in public dialogue about risk’.<sup>379</sup> This demonstrates not only that public judgment and attitude does not undermine the legitimacy of the environmental regulation, but also that it constitutes an important element of the process, which is gaining increasing attention.<sup>380</sup> Furthermore, it provides evidence of the potential of the principle for democratization, coming from its ability to uncover the trade-offs inherent in risk analysis.<sup>381</sup>

### 3.2.2 The role of science in decision-making

Science plays a crucial role in environmental decision-making. When identifying an environmental harm, tribunals mostly ask for, and rely on, scientific proof. In many cases tribunals reject a claim due to the lack of scientific evidence that certain activity poses a risk to the environment. This section intends to highlight the importance of science in environmental decision-making and describe its limitations. This will serve as a basis for adopting precautionary measures.

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<sup>378</sup> These included people who are: 1) directly affected by a decision to take action on an issue or project; 2) interested in a project or activity, want to become involved in the process, and seek an opportunity to provide input; 3) more generally interested in the process and may seek information; and 4) affected by the outcome of a decision but are unaware of or do not participate in stakeholder processes. In: Terry F. Yosie and Timothy D. Herbst, ‘Using Stakeholder Processes in Environmental Decision-making: An Evaluation of Lessons Learned, Key Issues, and Future Challenges,’ Ruder Finn, Washington, September 1998. Available at: < <http://www.gdrc.org/decision/nr98ab01.pdf> >.

<sup>379</sup> Dayna Scott, ‘Shifting the Burden of Proof: The Precautionary Principle and Its Potential for the Democratization of Risk’, in *Law and Risk / Edited by the Law Commission of Canada* (Vancouver: UBC Press, 2005), p. 70.

<sup>380</sup> Triggers for soliciting public opinion see: Terry F. Yosie and Timothy D. Herbst, ‘Using Stakeholder Processes in Environmental Decision-making: An Evaluation of Lessons Learned, Key Issues, and Future Challenges’, Ruder Finn, Washington, September 1998. Available at: < <http://www.gdrc.org/decision/nr98ab01.pdf> >.p.5. Triggers such as the lack of public confidence and trust, increasing transparency, greater societal expectations for environmental quality, limitations of traditional regulation, expanded interest in participation, growing diffusion of information, policy commitments.

<sup>381</sup> Scott, 2005, p. 52.

Science is the method of extracting best practice and standards. Due to its rigor and objectivity it is believed to be capable of making sound decisions.<sup>382</sup> Gregory et al, argue that the key judgment tasks that form the fundamental aspects of environmental decision-makings have been mostly taken from the domain of science. These tasks include explicit value judgments, creating alternatives by merging scientific facts and identified values and addressing conflicts about uncertainty. The responsibility of addressing these issues lies on the decision maker's shoulder, and cannot be resolved by good science alone.<sup>383</sup>

At large, science describes what we know, whereas decision makers decide what we value; science can *address* the risks and problems but cannot *decide* what to do.<sup>384</sup> At the risk assessment phase, scientific methods help to identify alternative candidates for taking action, the consequences of a certain hazard (realistic and estimations) and the potential consequences of a proposed action. Nonetheless, these are the likely consequences, and not the required actions- i.e. scientists deliver information and not prescription.<sup>385</sup> Science provides substantial inputs to the decision-making process but its role is limited and very specific; it ensures that the decision makers are making 'sound interpretations of the consequences'.<sup>386</sup> Therefore it is not for science to determine the acceptable level of risk, or the actions to be taken to mitigate them. Making decisions on the acceptability of the risk for the society, the cost-benefit analysis and also the implied trade offs are not scientific decisions. Thus, science plays a crucial role in decision-making process, but only in identification and characterisation of risks and estimation of the consequences. This means that its role is minimal in making choices and trade-offs. According to Gregory et al:

Objective science is only capable of stating that one risk is likely to be more significant than another with respect to a given attribute; it cannot determine if that risk is "acceptable" or if the cost of reducing it is "worth it" or if changes should be made in the short-term or long-term.<sup>387</sup>

Moreover, it has been argued that to make a democratic decision and comply with administrative law, agencies who are in making environmental decisions not only have

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<sup>382</sup> Robin Gregory and others, 'Some Pitfalls of an Overemphasis on Science in Environmental Risk Management Decisions', *Journal of Risk Research*, 9.7 (2006), 717–35.

<sup>383</sup> *Id.* p.717.

<sup>384</sup> *Id.* p.720. Cary Coglianese and Marchant Gary E., 'Shifting Sands: The Limits of Science in Setting Risk Standards', *University of Pennsylvania Law Review*, 152 (2004), 1255 (p. 1259).

<sup>385</sup> *Id.* p.721.

<sup>386</sup> *Id.*

<sup>387</sup> *Id.* 731.

to make references to scientific evidence, but also demonstrate the value of the choices that are inherent in their decision making.<sup>388</sup>

Acknowledging scientific uncertainty does not devalue science. It involves undertaking an action assuming that the environmental consequences are well understood and easily predicted,, which justifies the importance of the precautionary decision-making.<sup>389</sup> Wynne differentiated between two types of uncertainty. The first type is the conventional concept of uncertainty, which is caused by a lack of data, and can be resolved by conducting more studies and collecting more evidence.<sup>390</sup> The second is indeterminacy, which is the ‘recognition of the essentially open-ended and conditional nature of all knowledge and its embeddedness in social context’.<sup>391</sup> It has been argued that the conventional science and risk assessment methods tend to handle all uncertainties ‘as if they were due to the incomplete definition of an essentially determinate cause-effect system’.<sup>392</sup> This method would fail when the subject matter under study is a complex system however, and its process cannot be captured by those methods.<sup>393</sup> For instance, in the case of accumulation, conditions can change dramatically, which, combined with the ‘erratic influences’ of social behavior, can create uncertainty in all scientific assessments.<sup>394</sup>

The impact of uncertainty has caused disagreements as to the appropriate role of science. There is no consensus on the objectivity of science, as one might assume, and the literature is quite divergent on this topic. Advocates of the objectivity of science, believe that there is no room for precaution, and that science is and should remain value-neutral.<sup>395</sup> Its opponents, however, claim that science is not completely objective, and that expert’s findings necessarily involve a value component, since they cannot be

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<sup>388</sup>Coglianesi and Gary E., p. 1258.

<sup>389</sup> Elizabeth Fisher, ‘Environmental Law as ‘Hot’ Law’, *Journal of Environmental Law*, 25.3 (2013), p.351.; For scientific uncertainty see also: Jean-Francois Lyotard, *The Postmodern Condition: A Report on Knowledge*, trans. by G. Bennington and B. Massumi (Manchester University Press, 1984).

<sup>390</sup> Brian Wynne, ‘Uncertainty and Environmental Learning: Reconceiving Science and Policy in the Preventive Paradigm’, *Global Environmental Change*, 1992, 111 (p. 112).

<sup>391</sup> Jane Hunt, ‘The Social Construction of Precaution’ in Tim O’Riordan and James Cameron (eds.) *Interpreting the Precautionary Principle* (London: Cameron May, 1994) 117 at 118.

<sup>392</sup> Wynne, 1992, p. 116.

<sup>393</sup>Scott, p. 60. See also: Brian Wynne and S. Mayer, ‘How Science Fails the Environment’, *New Scientist*, 139.1876 (1993), 32–32.

<sup>394</sup> Scott p.60.

<sup>395</sup> John S. Gray, ‘Statistics and the Precautionary Principle’, *Marine Pollution Bulletin*, 21.4 (1990), 174–76 (p. 174). The author claims that PRECAUTIONARY PRINCIPLE is purely administrative and has nothing to do with science.



separated from their own perspectives.<sup>396</sup> Although objectivity in science is the ideal type<sup>397</sup>, there are situations where these beliefs become relevant, i.e. when there is a significant threat to the environment that the decision maker must address. Scientists routinely adopt worst-case assumptions when data is unavailable or not sufficient. The argument is that these assumptions can not be based merely on scientific grounds, to be decided by risk assessors and scientists in the la., The risk manager, namely the policy maker, must decide whether a given risk is acceptable to society.<sup>398</sup>

The early version of the precautionary principle was considered to deal with conventional uncertainty. According to its temporary character, it will be bridged by more scientific research and therefore is a tool in the hand of decision makers to 'buy more time'.<sup>399</sup> The realistic role of science is explained as:

If the status of scientific knowledge shifts from being the objective, final arbiter to a more conditional and consensus-seeking knowledge form, which allows other forms of knowledge equal standing (and there is evidence that this is occurring), then its legitimacy function may be re-affirmed through a more realistic, and less rhetorical, appreciation of what science can and cannot do with respect to environmental management.<sup>400</sup>

The opponents believe that by penetrating into the science and risk assessment phase, the precautionary principle manipulates the truth, which is the objective of science. However, Scott rejected this observation by remarking that:

Burdens of proof are as inevitable in hypothesis testing as they are in law. The nature of a burden is that it is deliberately unbalanced- it is biased. Shifting the burden of proof, then, in science means being explicit about what values are favored and why. We have not surrendered truth because what we were getting in the past was not 'pure truth' but truth encompassing a hidden judgment- a measure of justice not disclosed....science does not provide objective truth but 'it delivers truth with a healthy dose of justice mixed in'.<sup>401</sup>

Be that as it may, applying the precautionary principle is not a rejection of scientific method whatsoever. On the contrary, it is through science that hazards are recognised, and the two must work together to reach a desirable result. The precautionary principle

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<sup>396</sup> See Sheila Jasanoff, *The Fifth Branch: Science Advisers as Policymakers*, New Ed edition (Harvard University Press, 1994), p. 9; Dinah Shelton and David freestone and Ellen Hey, 'The Impact of Scientific Uncertainty on Environmental Law and Policy in the United States', in *The Precautionary Principle and International Law: The Challenge of Implementation*, International Environmental Law and Policy Series, David freestone and Ellen Hey (Netherlands: Kluwer Law International, 1996), p. 209 (p. 212).

<sup>397</sup> Jasanoff, 1994, p. 231.

<sup>398</sup> Henk van den Belt and Bart Gremmen, 'Between Precautionary Principle and 'Sound Science': Distributing the Burdens of Proof', *Journal of Agricultural and Environmental Ethics*, 15.1 (2002), p. 111.

<sup>399</sup> Wynne, p. 118.

<sup>400</sup> Jane Hunt, 'The Social Construction of Precaution', in *Interpreting the Precautionary Principle*, ed. by Timothy O'Riordan and James Cameron (London: Routledge, 1994), p. 117 (p. 118).

<sup>401</sup> Scott p.66

suggests that science does not always provide all the answers, and that in managing potential risks some other elements are also relevant, such as social sciences, common fears, etc.<sup>402</sup> It allows biased decision making by granting the environment the benefit of the doubt when it comes to new technologies and development.<sup>403</sup> It is more of a ‘go-slow’ approach rather than ‘stop and end’. Some banning measures are adopted based on the principle, however, which shows a level of harm in the proposed activity that is beyond society’s acceptable levels. This is an extreme example of precautionary action, and is not necessarily applied in all cases. New technologies are welcomed after meeting the certain predetermined criteria for safety through EIA, for instance.

Environmental protection is constantly improving, and therefore governments and decision-makers are introducing more measures to ensure compliance with international and national standards. This issue was discussed in the previous chapter, which considered the surge of environmental components in investment disputes, and the wide range of monitoring mechanisms that they include. This discussion also observed the crucial role of the investment tribunals, and the difference they could make by acknowledging the environmental concerns of the host states. The following section aims to analyze the precautionary principle regardless of its impact on investment disputes. It aims to demonstrate the potential of the principle as a tool for tribunals, and to understand: What precisely are the dimensions of the core content just mentioned? To what extent can and does the principle guide the decisions of governments in concrete instances? When is it triggered? What measures qualify for its implementation? Who bares the burden of proof? These and other queries must be addressed to answer the main research question posed above.

The advantages of addressing these questions could be useful for the arbitral tribunal resolving a dispute between a host state and a foreign investor. It would enable the tribunal to interpret the provisions of the investment treaties while taking into account the current trends regarding environmental protection and supervision. These questions will chiefly be answered by analyzing the principle’s definition, core elements, criticisms and also its legal status and application.

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<sup>402</sup> Jon M. Van Dyke, ‘The Evolution and International Acceptance of the Precautionary Principle’, in *Bringing New Law to Ocean Waters*, David D. Caron and Harry N. Scheiber (Leiden: Nijhoff, 2004), p. 377.

<sup>403</sup> Van Dyke, 2004. p. 377.

### 3.3 Precautionary Principle<sup>404</sup>

In general, the logic behind the principle<sup>405</sup> is the idea of *in dubio pro natura*, meaning if in doubt decide in favour of the environment.<sup>406</sup> This is an age-old concept, and references are found in oral tradition around the globe, in accordance with common sense, as the proverbial ‘look before you leap’. The recognition of the principle comes mainly from the intuitiveness of the general *idea* of precaution,<sup>407</sup> which is much wider than the *principle*, and does not provide any guidance for specific situations.<sup>408</sup> Nonetheless, the motivation behind its introduction as a principle was partly due to the flaws in orthodox approaches towards environmental decision-making, which was chiefly based on risk assessment and cost-benefit analysis.<sup>409</sup>

The principle has been criticised widely inside and outside of academia. Several analyses and definitions from various disciplines have been conducted, such as risk analysis, legal theories, philosophy, economics, ethics and political science.<sup>410</sup> The practicality of the principle however remains a matter of continuing controversy. The main debate centres over two basic but crucial issues: definition and implementation.<sup>411</sup> Notwithstanding these controversies, the principle is an important, if not the most important, general principle of international environmental law. Some commentators have even suggested that the criteria for the formation of the customary international law have already been fulfilled.<sup>412</sup> Some others do not support the idea that it is a norm of customary law, but

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<sup>404</sup> Mention the close relationship with the concept of SD. Arie 33./ Gobcicovo: need to reconcile economic development with protection of the environment

<sup>405</sup> Pierre-Marie Dupuy and Jorge E. Vinuales, *International Environmental Law*, 2015, pp. 52–54. the discussion on difference btw principle, norm and concept. Also see Ulrich Beyerlin, ‘Different Types Of Norms In International Environmental Law Policies, Principles, And Rules’, in *The Oxford Handbook of International Environmental Law*, ed. by Daniel Bodansky, Jutta Brunnée, and Ellen Hey (OUP Oxford, 2008), p. chapter 18.

<sup>406</sup> See Trouwborst, ‘The Precautionary Principle in General International Law: Combating the Babylonian Confusion’; Marko Ahteensuu, ‘Defending the Precautionary Principle Against Three Criticisms’, *Trames-Journal of the Humanities and Social Sciences*, 11.4 (2007), 366–81; Asselt and Vos.

<sup>407</sup> David vanderzwaag 2002 quoted in ahteensuu p.964

<sup>408</sup> Dr Marko Ahteensuu and Dr Per Sandin, ‘The Precautionary Principle’, in *Handbook of Risk Theory*, ed. by Sabine Roeser and others (Springer Netherlands, 2012), pp. 961–78 (p. 964) .

<sup>409</sup> Stephen M. Gardiner, ‘A Core Precautionary Principle’, *Journal of Political Philosophy*, 14.1 (2006), 33–60 (p. 35) ; Timothy O’Riordan and Andrew Jordan, ‘The Precautionary Principle in Contemporary Environmental Politics’, in *Protecting Public Health and the Environment: Implementing the Precautionary Principle*, Raffensberger and Tickner 1999 (Washington, DC: Island Press, 1999), pp. 15–35.

<sup>410</sup> Ahteensuu, M. & Sandin, supra 408, para. 963.

<sup>411</sup> There is one other important criticism which is the status of the principle which is not the focus of this chapter but will be dealt with in chapter 5.

<sup>412</sup> Cil:Sands,16Cameron and Abouchar,17McIntyre andMosedale18areamong those in favour of its being a norm of customary law 16Philippe Sands, *Principles of International Environmental Law*, (Cambridge, Cambridge University Press, 2003), 279. 17J. Cameron and J. Abouchar, ‘The Status of the Precautionary Principle in International Law’ in D. Freestone and E. Hey, *The Precautionary Principle and International Law: The Challenge of*

regard it rather as a general principle of law.<sup>413</sup> This demonstrates how far the discourse on the topic has reached; it is very unlikely that commentators will reach a consensus in the near future. Furthermore, the decisions of international courts and tribunals do not help to clarify the aforementioned issues as well. As a result, the precautionary principle remains one of the most contentious concepts of environmental law.<sup>414</sup>

The precautionary principle has been heavily criticised since its emergence and rapid growth. Its critics have raised different concerns, while some have taken the extreme of refusing to recognise the existence of such a principle. Other critics have recognised it, but have criticised its function and appointed a soft weight on its applicability. This section will evaluate some of those arguments, and attempt to respond to them. While some critics take a more pessimistic view on the applicability of the principle, some others only question some of its aspects.

The more radical reviews suggest that the precautionary principle is not even a real principle, for it has some serious and even fatal flaws; it could only be an approach for decision making. Other condemnations include: the principle calls for proving the absence of harm, which is impossible;<sup>415</sup> It is unnecessary; it imposes more harm and increases costs;<sup>416</sup> and it is reckless, arbitrary, and ill-advised.<sup>417</sup> Unnecessary precaution results from unjustified fears, which could paralyse actions, as the principle requires conclusive proof of zero risk.<sup>418</sup> In the political scope, the Bush administration official in charge of the regulatory policy called the principle ‘a mythical concept, perhaps like a unicorn’.<sup>419</sup> There has been even disagreement over the inclusion of the principle as a

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Implementation, (The Hague, Kluwer Law International, 1996), 52. 18McIntyre and Mosedale, (n 4) 235./ ITLOS sea bed / 2012 ILO report of principles for climate change

<sup>413</sup> Patricia Birnie, Alan Boyle and Catherine Redgwell, *International Law and the Environment*, 3rd edn (OUP Oxford, 2009), p. 163; Jonathan B. Wiener and Michael D. Rogers, ‘Comparing Precaution in the United States and Europe’, *Journal of Risk Research*, 5.4 (2002), 317–49 (p. 599).

<sup>414</sup> Kayikci, p.2.

<sup>415</sup> Roel Pieterman and J.C. Hanekamp, *The Cautious Society? An Essay on the Rise of the Precautionary Culture* (Amsterdam: Stichting Heidelberg Appeal Nederland, 2002), pp. v-vi.

<sup>416</sup> John N. Hathcock, ‘The Precautionary Principle - An Impossible Burden Of Proof For New Products’, *Journal of Agrobiotechnology Management & Economics*, 3.4 (2000), 255–58; Noah M. Sachs, ‘Rescuing the Strong Precautionary Principle from Its Critics’, *University of Illinois Law Review*, 2011, 1285 (p. 1307). P. 255.

<sup>417</sup> Gary Elvin Marchant and Kenneth L. Mossman, *Arbitrary and Capricious: The Precautionary Principle in the European Union Courts* (American Enterprise Institute, 2004), p. 1.

<sup>418</sup> Hathcock. P. 255.

<sup>419</sup> John D. Graham, administrator of the White House Office of Management & Budget's Office of Information & Regulatory Affairs, explained U.S. policy on the precautionary principle at a conference in Brussels in January 2002.

component of the risk management phase. Its opponents believe that decision makers could use its inclusion to completely refute the role of science.<sup>420</sup>

One of the most cited arguments against the principle is its vagueness and that it suffers from ‘profound ambiguity’.<sup>421</sup> It is undefined, and therefore is unfit to guide the actions of government and decision makers. It is more of guide for beliefs, rather than actions, and is considered to be purely an epistemic or procedural principle.<sup>422</sup> Bodansky argued that the principle, at its best, can serve as a general goal, and not a regulatory standard, since it does not specify how much precaution should be made/taken.<sup>423</sup>

The opponents’ main concern is that the unnecessary fears and risk-averse approach associated with the principle could paralyse and stifle innovation, leading to economic stagnation.<sup>424</sup> The consequences could prevent new technologies that commonly contain high degree of uncertainty, for instance, particularly if implementation of the principle causes the shifting of burdens.<sup>425</sup> Miller and Conko, for instance, claimed that if the principle had been implemented in the past then we would not have antibiotics or vaccines today.<sup>426</sup> Sustain has claimed that the principle forbids all courses of action; he also deemed the pre-marketing testing of the drugs unnecessary and argued that such a principle is logically incoherent.<sup>427</sup> He suggested that the only way to avoid this predicament is a cost-benefit analysis. Critics have suggested that by conducting quantitative analysis in scientific researches, regulators will be able to evaluate the cost of different actions. They can then make the most cost effective and risk-reducing measures by identifying the risks.<sup>428</sup>

Having mentioned the essence of the central criticisms, this study does not attempt to defend every measure taken based on the principle. Some precautionary decisions and measures to protect the environment or health can be prone to political favouritism, and

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<sup>420</sup> Hathcock. P. 255.

<sup>421</sup> Pieterman & Hanekamp, 2002 p.6

<sup>422</sup> Ahteensuu, M. & Sandin, P. (2012), ‘The Precautionary Principle’, in (eds.) Hillerbrand, R., Sandin, P., Roeser, S. & Peterson, M.), *Handbook of Risk Theory: Epistemology, Decision Theory, Ethics and Social Implications of Risk*.

<sup>423</sup> Daniel Bodansky, ‘The Precautionary Principle in US Environmental Law’, in *Perspectives on the Precautionary Principle*, Ronnie Harding and Elizabeth C. Fisher (Federation Press, 1999), p. 5.

<sup>424</sup> Pieterman & Hanekamp, 2002 pp. ix and 2 (Pieterman, R. & Hanekamp, J.C., *The Cautious Society? An Essay on the Rise of the Precautionary Culture*, Heidelberg Appeal Netherlands report, 2002)

<sup>425</sup> Cass R. Sunstein, *Laws of Fear: Beyond the Precautionary Principle* (New York: Cambridge University Press, 2005), p. 25.

<sup>426</sup> *Id.* P.49

<sup>427</sup> *Id.* p.29.

<sup>428</sup> Noah M. Sachs, ‘Rescuing the Strong Precautionary Principle from Its Critics’, *University of Illinois Law Review*, 2011, 1285 (p. 1307).

can be disguised as being genuinely precautionary.<sup>429</sup> The principle is not an alien to decision makers however, even to the United States (its strongest critic according to its practice). It is not paralysing and cannot be so easily dismissed.

Advocates have referred to the generality of the principle when responding to the main argument against it. To them, the measures to be taken, the degree of the threat and the amount of the information are not specified. Those that assume that the precautionary principle should have a clear list on those issues are missing the point of the principle's generality and wide application.<sup>430</sup> Also, like other principles it offers a framework towards decision-making, and should not be expected to offer a detailed prescription for action. This should be defined through legislation, and not the principle itself, because the 'regulatory design' responses and timing of the action would vary depending on many different contexts. Therefore, it would be irrational and unrealistic to expect a one or two sentence principle to provide total guidance for regulators in managing multifaceted health and environmental risks.<sup>431</sup> Its generality should also not be considered as a truism, and the vacuity of the principle creates 'a recognizable architecture'. This establishes who bears the burden of proof in the case of complex environmental and health risks.<sup>432</sup> In fact, many international courts and tribunals use the principle as a basis for resolving environmental and health related disputes. These include the ICJ, WTO, ITLOS, ECHR and CJEU (Court of Justice of the European Union – formerly ECJ).<sup>433</sup>

As to the relationship between science and the principle, it has been contended that the application of the precautionary principle does not reject science and scientific analysis, in the contrary, it is, in fact, consistent with science and requires sound scientific risk assessment to demonstrate potential risks on an ex-ante basis, rather than 'a reactive posture' in response to harm that has already happened.<sup>434</sup> The principle offers flexibility in each area of risk regulation, determining the tolerable level and a

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<sup>429</sup> *Id.* p.1311.

<sup>430</sup> *Id.* P. 1297.

<sup>431</sup> *Id.*

<sup>432</sup> *Id.*

<sup>433</sup> See, Lawrence A. Kogan, 'What Goes Around Comes Around: How UNCLOS Ratification Will Herald Europe's Precautionary Principle as U.S. Law', *Santa Clara Journal of International Law*, 7 (2009); McIntyre and Mosedale, p. 221.

<sup>434</sup> Noah M. Sachs, *supra* 430, p. 1297.

threshold for action. The principle cannot be inherently unworkable as it is already used in several national laws, including US law.<sup>435</sup>

It has also been argued that the principle approaches complex trade-offs through deliberation, moral reflection and appreciation of the limits of human cognition. This is as apposed to cost-benefit analysis, which ‘proceeds awkwardly in the absence of fully characterized risks’, and involves questionable monetization of harm to the environment and public health.<sup>436</sup> In addition, the precautionary principle could help decision makers make choices between the ‘avoidance of sure immediate loss and avoidance of unsure future loss’.<sup>437</sup> Therefore, not using the principle would result in tort remedies or ex-post regulatory interventions, neither of which is desirable, or capable of preventing harm from happening.

Nevertheless, there is an element that characterizes almost all of the statements concerning the precautionary principle in international legal texts: the reference to scientific uncertainty. More precisely, the principle attributes legal significance even in situations where the science is divided or uncertain on the actual existence and extent of a risk. The doctrine aptly captures this aspect of the innovative nature of a precaution, as opposed to the traditional approach in environmental protection policies. Tradition dictates that it is necessary to have a certain scientific response to the risks involved before taking steps to avoid them. This evolution is schematically summarized as a shift from prevention to precaution.<sup>438</sup>

This section is devoted to examine the definition, elements and status of the principle under international law, in addition to analysing some of the main criticisms. It will then analyse the potential functions of the principle, which are both procedural and substantive. For the first function, the potential and limitations of the principle will be examined as a burden-shifting instrument. In addition, this section will highlight some

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<sup>435</sup> The FDA review process of the drugs is a prime example of the application of the strong pp. according to which all the drugs or those who are falling under the definition of the drug are presumptively banned unless its safety is proven based on the relevant data on risks, side effects and efficiency. A potent form of the precautionary principle. the precautionary response to untested drugs which pose a serious threat to human health is a complete ban without any cost benefit analysis. Without any cost benefit and it remains until it's proven to be safe. This regulation is been going on since 1962 without hindering any technological improvement and paralyzing the market and the development of the technology. In addition to the FDA preapproval of drugs there exist another example of the US precautionary regulatory design which is the EPA preapproval system for pesticides. Id. pp. 1308-10.see also, Cameron and Abouchar.

<sup>436</sup> Noah M. Sachs, *supra* 430, p. 1317.

<sup>437</sup> *Id.* p. 1316

<sup>438</sup> Saverio Di Benedetto, ‘La Funzione Interpretativa Del Principio Di Precauzione In Diritto Internazionale’, *Diritto Del Commercio Internazionale*, 2 (2006), 321. Unofficial translation.

references to this function in case law. The second function, which is the main focus of this research, is the substantive. This involves the application of the principle as an interpretative tool. An evaluation of case law is warranted to provide a practical example of its potential applicability. This will also provide an accurate evaluation of the substantive function of the principle. For this purpose, the principle will be examined in the ECJ, ICJ, ITLOS and WTO. The jurisprudence on the precautionary principle will be discussed separately in chapter four, as it involves a detailed analysis. The conclusion on the analytical framework, which has been extracted from both chapters, will also be demonstrated at the end of chapter four. Therefore, the goal is to provide, as the outcome of chapters three and four combined, a ‘precautionary test’, which consists of a set of questions to be applied by the investment tribunals.

### 3.3.1 Definition

Controversy over the definition of the precautionary principle starts from the very beginning: is it even a principle? Some have suggested that it is more proper to call it an ‘approach’, rather than a ‘principle’.<sup>439</sup> According to a state’s practice, there is no substantive difference between the precautionary principle and a precautionary approach. The difference is only terminological, and according to some scholars, is rhetorical.<sup>440</sup> The term is used interchangeably, as both of them represent the same concept, with the same features, components and characteristics.<sup>441</sup>

As per the content, failing a secure definition, the principle has often been criticised for not having a uniformly applicable description.<sup>442</sup> It is however, an undeniable fact that different definitions exist both at the national and international level. Many instruments have only referred to the principle without actually providing a definition.<sup>443</sup> Arguably,

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<sup>439</sup> ; Jon M. Van Dyke, ‘The Evolution and International Acceptance of the Precautionary Principle’, in *Bringing New Law to Ocean Waters*, David D. Caron and Harry N. Scheiber (Leiden: Nijhoff, 2004), p. 377. 2013. P.88.

<sup>440</sup> Foster, *Science and the Precautionary Principle in International Courts and Tribunals: Expert Evidence, Burden of Proof and Finality*, p. 305.

<sup>441</sup> Trouwborst, *Precautionary Rights and Duties of States*, p. 7. adopted by UNGA in 1997 referred to principle 15 of the *Rio Declaration* as precautionary principle while the text of the principle 15 itself is precautionary. In the *Rio Declaration*, while the heading of each section is principle each of which explain one principle, the definition itself says the precautionary approach

<sup>442</sup> McIntyre and Mosedale, p. 223; Boisson de Chazournes, ‘Precautionary Principle’, in *Precaution from Rio to Johannesburg: Proceedings of a Geneva Environment Network Roundtable* (Geneva: International Environment Haous, 2002), pp. 10–12 (p. 10); Pieterman and Hanekamp; Philippe Sands, p. 272; Bodansky, ‘Deconstructing the Precautionary Principle’, pp. 381–382; Trouwborst, *Evolution and Status of the Precautionary Principle in International Law*, p. 51.

<sup>443</sup> Among them are the 1985 *Convention on the Protection of the Ozone Layer* (also known as the Vienna Convention, see preambular paragraph 5) and its 1987 *Protocol on Substances that Deplete the Ozone Layer* (Montreal Protocol, preambular paragraph 8), both as amended in 1990 (London Amendments of 1990);



the formulation provided by the *Rio Declaration* is not the best version of the principle. This has been the most commonly noted version and is thus argued to be the cause of the majority of the controversies over its implication. It states that:

In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.<sup>444</sup>

Many scholars have commented on this issue, and have provided different answers. For instance, at the time some thought the principle's vagueness made it impossible for it to be clearly defined; some thought it was left undefined so that its future development wouldn't be impaired; some referred to disagreements over a unified definition. Nevertheless, it is argued that there is no need for the principle to be defined. In that, after the 1992 *Earth Summit* and the principle 15 of the *Rio Declaration*, the principle was so globally known that apparently the need for defining the principle was diminished. This was argued to be the logic behind the development of any norm. Nevertheless, the most logical reason could be the capacity of the principle as a general principle of international environmental law; a specific definition could limit its capacity.<sup>445</sup>

The EU has been the pioneer of the principle, and has vouched for it in regulatory and judiciary level. The EU member states have widely applied it and aided its development. However, even in the EU instruments such as the *EC Treaty*, the 2000 *Commission on the Precautionary Principle* and also the *Council's Resolution on the Precautionary Principle*, the principle was explicitly mentioned but not defined. This might suggest that being undefined does not impede its application to a wide array of environmental topics. It remains open to accommodate particular actions, and to respond to particular circumstances.

However, in the literature, it has become common to differentiate between weak and strong versions to classify and justify different formulations of the principle. The weak versions follow preventive goals and allow regulators to take action in the case of potential harm, without waiting for the full scientific proof. They do not prescribe any particular regulatory measures. Critics such as Cass Sunstein favour implementing this

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the 1992 amendments to the *Treaty Establishing the European Community* (EC Treaty, Article 174(2)); the 1996 Protocol (to the Barcelona Convention) on the *Prevention of Pollution of the Mediterranean Sea by Transboundary Movements of Hazardous Wastes and their Disposal* (Mediterranean Hazardous Wastes Protocol, Article 8(3)).

<sup>444</sup> *Rio Declaration*, supra 128, principle 15.

<sup>445</sup> Trouwborst, 2006, pp. 23–25.

weak version of the principle.<sup>446</sup> Principle 15 of the *Rio Declaration* represents a weak version of the principle, despite its wide application.<sup>447</sup> It is weak since it does not directly order states to take action. Instead it suggests that if there is a threat of harm, the uncertainty of science ‘*shall not be used as a reason for postponing*’ action.<sup>448</sup> The Wingspread Statement, as an example of a strong version, asserts that:

Where an activity raises threats of harm to the environment or human health, precautionary measures *should be taken* even if some cause and effect relationships are not fully established scientifically.<sup>449</sup>

It takes a further step towards strengthening the principle by suggesting a shift in the burden of proof. This is achieved by affirming that the ‘*proponent of an activity*, rather than the public, bears the burden of proof.’<sup>450</sup>

In the weak version, regulators *should be empowered to address the risk* even in the case of scientific uncertainty or regulators are allowed to take precautionary measures. The strong version, however, requires an affirmative call for action, as precautionary measures *should be taken*.<sup>451</sup> The weak version is seen as negative, and therefore ‘less demanding’ and less ‘action-forcing’.<sup>452</sup> Another difference is that the weak version concerns the ‘timing’ of the governmental measure, whereas the strong version ‘shifts the burden of proof’ from decision maker to the performer of the risk-creating activity. This proves that the activity does not cause any serious or unreasonable risk to the environment.<sup>453</sup> However, the measures chosen by the regulator will ‘necessarily’ vary depending on the potential harm and strength of the evidence. Accordingly, they could range from a total ban to more relaxed measures such as warning requirements, moratoriums or EIA requirements.<sup>454</sup>

These considerations aside, the lack of unified description does not and should not prevent and interrupt the principle’s function. It is possible to trace a set of common elements among the array of definitions, according to state practice, through several instruments. The meaning has been developed through repeated application and

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<sup>446</sup>Sunstein, *Laws of Fear*.

<sup>447</sup>Linda Cameron, *Environmental Risk Management in New Zealand – Is There Scope to Apply A More Generic Framework?*, New Zealand Policy Perspectives Paper (New Zealand Treasury, 2006) <<http://www.treasury.govt.nz/publications/research-policy/ppp/2006/06-06>>.

<sup>448</sup>*Rio Declaration*, supra 126, principle 15.

<sup>449</sup>Wingspread statement on the precautionary principle, wingspread conference, 1998.

<sup>450</sup>*Id.*

<sup>451</sup>Noah M. Sachs, supra 430, p. 1295.

<sup>452</sup>*Id.*

<sup>453</sup>*Id.*

<sup>454</sup>*Id.*

controversies.<sup>455</sup> It is essential to outline the principle to determine it, as it applies under the practice of the states at the international level. This will find a common ground, which apparently exists. According to one commentator, the principle specifies the directions that the decision makers should take without specifying the parameters of decision making.<sup>456</sup> However, a closer look at the instruments that have adopted the principle shows a pattern in some of the parameters. This pattern will be explained in the following section under the elements of the precautionary principle.

### 3.3.2 Elements

Although differently phrased, the principle's common and basic components are traceable in various legal instruments.<sup>457</sup> Accordingly, three commonly accepted and quintessential elements of the principle are the (i) threat of environmental harm, (ii) uncertainty and (iii) action.<sup>458</sup> This means that the principle requires action whenever there is a threat of environmental harm, even in the lack of scientific certainty. By extension, this implies that the principle requires two elements before taking any action. The following paragraphs will elaborate on these elements as the thresholds of the principle's application.

#### 3.3.2.1 *Threat of Environmental harm*

The threat of environmental harm has been the leading trigger for emergence of the principle as a means of anticipation and prevention.<sup>459</sup> It is appropriate therefore to explain this factor as the principal element of the precautionary principle. Environmental risks are unique in the sense that harm and damage to the environment is often 'irreparable, interminable and not compensable'.<sup>460</sup> With regard to the irreversibility of the environmental harm, the International Law Commission has acknowledged that 'compensation in case of harm often cannot restore the situation prevailing prior to the event or accident'.<sup>461</sup> Many examples of serious and irreversible damages to the environment have been caused by a lack of prudent and anticipation. For instance, problems regarding radioactivity, ozone layer, acid rain, fisheries and also

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<sup>455</sup> *Id.* pp. 1297-8

<sup>456</sup> Taylor, *supra* 176, p. 25.

<sup>457</sup> Trouwborst, 2006, p. 29.

<sup>458</sup> *Wingspread Statement on The Precautionary Principle*, January 1998.; Ebbesson, J., *Compatibility of International and National Environmental Law*, Dordrecht 1996. Pp. 119-120; Marr, *The Precautionary Principle in the Law of the Sea*, p. 9.; Trouwborst, 2006, p. 30.

<sup>459</sup> Trouwborst, 2006, p. 37.

<sup>460</sup> Gray, K.R., *International Environmental Impact Assessment*, in 11 *CJIELP*, 2000, pp. 83-128., p.98.

<sup>461</sup> International Law Commission 2001, General commentary to the Draft Articles on Harm Prevention.

persistent organic pollutants (DDT, TBT and PCB) are the adverse consequences of not taking the precautionary approach into account.<sup>462</sup>

The beginning of concerns over damages to the environment can be traced back to the 1972 *UN Conference on the Human Environment in Stockholm*, where the states acknowledged that ‘through ignorance or indifference we can do massive and irreversible harm to the earthly environment on which our life and well-being depend’.<sup>463</sup> The same concern was highlighted in the 1988 *Baltic Sea Declaration*,<sup>464</sup> in which the committee was convinced that ‘damage to the marine environment can be irreversible or remediable only in a long term perspective and at considerable expenses.’<sup>465</sup> The *Rio Declaration* was a significant statement of the principle, and has been frequently referred to by other instruments. It highlighted the element of environmental protection as the principal objective of the precautionary principle.<sup>466</sup> This concern has continued to be the primary reason for the existence and development of the precautionary principle and, according to Bodansky, has become the ‘staple’ of every environmental agreement.

Be that as it may, for practical reasons not *all* environmental harms are always irreparable, and therefore not all of them count as a trigger for taking precautionary measures.<sup>467</sup> There are different types and levels of risks threatening the environment, including natural risks, technological risks and mixed risks. Mixed risks concern the natural patterns being disrupted by disproportionate human interferences.<sup>468</sup> Nevertheless, not all types of risks and harms should be completely banned. In other words, the principle does not cover all damages to the environment. Of those that it does cover, not all would trigger a precautionary action. Therefore, it must be asked if, under international law, the application of the principle is limited to certain *thresholds* of environmental harm. If so, what particular thresholds trigger the principle to have legal consequences? According to different formulations, there are some *thresholds of magnitude* to be met to activate the duty of taking precautionary action. While some formulations do not set out a minimum threshold to apply the principle, other formulations do make

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<sup>462</sup> Report of the European Environmental Agency, *Late lessons from Early Warnings: the Precautionary Principle*, supra 352.

<sup>463</sup> Sixth preambular paragraph of the 1972 *Declaration of the UN conference on the Human Environment* (Stockholm Declaration).

<sup>464</sup> 1988 *Declaration on the Protection of the Marine Environment of the Baltic Sea Area*

<sup>465</sup> Preamble Paragraph 8.

<sup>466</sup> *Rio Declaration*, supra 128, principle 15. ‘In order to protect the environment, the precautionary approach shall be widely applied by States ...’. Emphasis added.

<sup>467</sup> Triggers for taking precautionary measures refers to the capacity of the precautionary principle under the international law and not the general idea of precaution.

<sup>468</sup> Trouwborst, *Precautionary Rights and Duties of States*, p. 7.

a threshold. They actually distinguish between different levels of gravity, and decide when the application of the principle becomes *obligatory*.

According to state practice in different international instruments, evidently, a minimum gravity standard must be introduced, the crossing of which activates the application of the principle. In other words, the principle becomes relevant only if the risk of harm to the environment is at least *significant*.<sup>469</sup> The *1992 Biodiversity Convention*<sup>470</sup>, the *OECD Council Recommendation on Integrated Pollution Prevention and Control*<sup>471</sup> and the *International Law Association (ILA)*<sup>472</sup> have all recommended that the principle should be triggered by a minimum of significant risk to the environment. Insignificant risk, as a result, does not bring the principle into play. Several definitions are provided for significant harm to the environment. Significant harm, for instance, should be ‘appreciable’ and ‘tangible’, as apposed to ‘trivial’<sup>473</sup>. It should be something ‘more than detectable’, but less than ‘serious or substantial’.<sup>474</sup>

Significance was set as the minimum threshold and starting point of the application of the principle in some documents. The second level of gravity of environmental harm not only triggers the principle but also necessitates its application, and as argued by some scholars, it becomes a duty of the states.<sup>475</sup> This level is the fear of ‘serious’ or ‘Irreversible’ harm to the environment. While ‘serious’ harm focuses more on the gravity and distribution of an environmental threat, ‘irreversible’ refers to the duration and persistence of the risks to the environment. They have been used either together or

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<sup>469</sup> For instance see: the 1988 *Baltic Sea Declaration* at eighth preambular paragraph; the PARCOM (Paris commission established under the late 1974 *Convention For The Prevention Of Marine Pollution From Land-Based Sources*) 1989 *Recommendation 89/1 on the Principle of Precautionary action; Principle 21 of the 1972 Declaration of the UN Conference on the Human Environment. (1972 Stockholm Declaration)*; the 1992 *Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention)* Article 2(2)(a).; see also Trouwborst, 2006. P. 44-47. There are some formulations of the precautionary principle where there is no requirement of a potential environmental damage to set a minimum. These types of broad formulation of the principle cover *all* the potential damages to be foreseen and is criticised for casting doubt on the fact that precautionary principle has certain thresholds to be triggered for its application.<sup>469</sup> Thus, there should be a *minimum level* of potential harm beyond which the application of the precautionary principle becomes necessary, otherwise it would mean that each and every minor environmental impact has to be prevented according to the principle, which makes it irrational and unfeasible.

<sup>470</sup> Preamble, paragraph 9. ‘where there is a threat of significant reduction or loss of biological diversity.’;

<sup>471</sup> 1991 Council Recommendation C(90)164 on Integrated Pollution Prevention and Control: ‘the absence of complete information should not preclude precautionary action to mitigate the risk of *significant harm* to the environment.’.

<sup>472</sup> Declaration on Principles of International Law in the Field of Sustainable Development, the International Law Association (ILA) at its 2002 Conference in New Delhi, paragraph 4.1. ‘A precautionary approach ...commits States...to avoid human activity which may cause *significant* harm to human health, natural resources or ecosystems...’.

<sup>473</sup> Commentary to the 1994 *ILC draft articles on The Law Of The Non-Navigational Uses Of International Watercourses*.

<sup>474</sup> ILC 2001, commentary to Article 2(a) of *the Draft Articles on Harm Prevention*, Paragraph 4.

<sup>475</sup> For an extensive analysis see Trouwborst. 2006. Supra 119.

separately. They were mentioned together for instance in principle 15 of the *Rio Declaration*, and also in some other international instruments<sup>476</sup> and tribunal decisions.<sup>477</sup>

Although principle 15 of the *Rio Declaration* represents a weak version, it adopted both thresholds as triggers, and called for precautionary action whenever there is a ‘serious’ or ‘irreversible’ threat of environmental harm.<sup>478</sup> Some other significant instruments adopted the same thresholds, such as: the 1990 *Bergen Declaration*<sup>479</sup>, the 1990 *Ministerial Declaration of the Second World Climate Conference*<sup>480</sup>, the 1992 *Climate Change Convention*<sup>481</sup>, the 1995 *Waigani Convention*<sup>482</sup>, the 1995 *Barcelona Convention amendments*,<sup>483</sup> the 1995 *Land-Based Activities Action Program*<sup>484</sup>, the 2002 *ASEAN Agreement on Transboundary Haze Pollution*<sup>485</sup> and the 2001 *Albatross Agreement*<sup>486</sup>. The formulations, suggested by different and widely accepted instruments, seem to differentiate the environmental threats according to their gravity. They incorporated different thresholds that need to be crossed for the principle to be applied – either as a right or as a duty.<sup>487</sup>

### 3.3.2.2 Uncertainty

The second element of the precautionary principle is ‘uncertainty’ or lack of scientific certainty, which is also among its basic components. The principle could be considered as a so-called permission to prevent environmental harm, without waiting for full scientific certainty. However, the uncertainty itself is not an unambiguous concept. It comes in multiple forms, for there are different sources for uncertainty.<sup>488</sup> It might result

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<sup>476</sup> 1990 *Bergen Declaration*; 1992 *Climate Change Convention*; 1995 *Barcelona Convention amendments*; 2002 *ASEAN Agreement on Transboundary Haze Pollution*.

<sup>477</sup> 1997 ICJ *Gabcigovo-Nagymaros*; 1999 ITLOS *Southern Bluefin Tuna*; 2003 ITLOS *Land Reclamation*.

<sup>478</sup> *Rio Declaration*, supra 128, principle 15.

<sup>479</sup> *Ministerial Declaration on Sustainable Development in the ECE Region*, (Bergen, May 1990) paragraph 7.

<sup>480</sup> Principle 7.

<sup>481</sup> *Framework Convention on Climate Change*, New York, 1992, Article 3 (3).

<sup>482</sup> *Convention to Ban the Importation into Forum Island Countries of Hazardous Wastes and Radioactive Wastes and to Control the Transboundary Movement and Management of Hazardous Wastes Within the South Pacific*, Article 1.

<sup>483</sup> Amendments to the 1976 *Barcelona Convention for Protection against Pollution in the Mediterranean Sea* Article 4(3)(a).

<sup>484</sup> UNEP, *Global Program of Action for the Protection of the Marine Environment from Land-based Activities* (GPA), paragraph 24.

<sup>485</sup> Association of South East Asian Nations, Article 3(3).

<sup>486</sup> *Agreement on the Conservation of Albatrosses and Petrels* (ACAP), Article II(3).

<sup>487</sup> Those commentators who believe in the normativity of the principle and advocates of its binding character suggest that precautionary principle becomes applicable when there is a fear of ‘significant’ harm to the environment and when this risk becomes ‘significant’ or ‘irreversible’ and exceeds this threshold, the *right* to take action becomes a *duty* of the states and hence, compulsory. Although, whether the harm qualifies as significant or serious and irreversible depends on the particular circumstances of each case. This hypothesis is supported by the occurrence of substantial portion of formulations that expressly set out such thresholds.

<sup>488</sup> The European union commented on the forms on uncertainty in its communication on the Precautionary principle: ‘Scientific uncertainty results usually from five characteristics of the scientific

from a lack of information, complexity and variability of the natural system, or from human interaction with the natural and ecological system.

A lack of information may result from the limited availability of tools or technologies, or from incomplete or inaccessible historical records. In addition, there is a lack of information on the baseline condition of the environment.<sup>489</sup> The environmental changes can hardly be measured without having a clear big picture of reliable records.<sup>490</sup> The uncertainty could also be caused by the quality of nature, the namely complexity and variability of the natural system. This complexity comes from the fact that everything in the nature is interrelated,<sup>491</sup> as confirmed by the signatories to the *Rio Declaration*, who stated that the nature of the earth is ‘integral and interdependent’.<sup>492</sup> This complexity of the natural system interrupts human understanding and accordingly inhibits the ability of science to foresee all the changes.<sup>493</sup> The peculiarities of the natural system make it extremely difficult to comprehensively understand and predict the dynamics of the ecosystem. The understanding of science from the dynamics of the ecosystem is limited, and is acknowledged as a matter of principle.<sup>494</sup> Along with this complexity, the unpredictability of nature adds to the uncertainty. In other words, the elements of the nature are not linear and regular, but rather are unpredictable and variable. When these two elements of nature combine, the ability of mathematical methods and laboratorial studies are fundamentally limited.<sup>495</sup> However, these qualities do not represent disorder, but rather evidence of unpredictability. Among the causes of uncertainty, one could not deny the role of the modern era and the interruptions made by human interaction. Examples of this include climate change, bioaccumulation, desertification, deforestation, pollution, acid rain, industrial and household waste, ozone layer depletion, genetic engineering and so on.

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method: the variable chosen, the measurements made, the samples drawn, the models used and the causal relationships employed. Scientific uncertainty may also arise from a controversy on existing data or lack of some relevant data. Uncertainty may relate to qualitative or quantitative elements of the analysis.’, *Communication COM(2000)1*, p. 14.

<sup>489</sup> Paragraph 19 of UN Doc. UNEP/CBD/COP/8/27/Add.3 of 18 October 2005. *Report Of The Group Of Legal And Technical Experts On Liability And redress In The Context Of Paragraph 2 Of Article 14 Of The Convention on Biological Diversity*. Available at: <<https://www.cbd.int/doc/meetings/cop/cop-08/official/cop-08-27-add3-en.pdf>>.

<sup>490</sup> James Gleick, *Chaos: The Amazing Science of the Unpredictable*. (1998 Vintage, London. Reprint, 1901), p. 169.

<sup>491</sup> Thomas M. Smith and Robert Leo Smith, *Elements of Ecology*, 8 edition (San Francisco: Benjamin Cummings, 2012).

<sup>492</sup> *Rio Declaration*, supra 126, final preambular paragraph.

<sup>493</sup> Trouwborst, 2006, supra 112, p. 78.

<sup>494</sup> Joel Tickner, Carolyn Raffensperger and Nancy Myers, ‘The Precautionary Principle in Action a Handbook’, 1998, p. 162.

<sup>495</sup> Trouwborst, 2006, supra 119, p. 78.

Several types of uncertainty have been discussed; not all of them are manageable. However, it is important to identify what type of uncertainty the precautionary principle targets. Trouwborst distinguished between different types of uncertainty as quantifiable risk in a comprehensive study on the principle. These included approximate certainty, uncertainty, and ignorance (figure 2 ).<sup>496</sup> After defining the risk as a function of gravity of harm and probability of harm (Risk = Gravity x Likelihood), he explained that a risk is quantifiable if the gravity and probability of harm are both known (approximately rather than genuine certainties).<sup>497</sup> The second type is where the gravity is known but the probability of the harm is unknown, and the third type (ignorance) is where both gravity and probability is unknown.

|                    | Gravity | Probability |
|--------------------|---------|-------------|
| Quantifiable risk  | known   | known       |
| Uncertainty Proper | known   | unknown     |
| Ignorance          | unknown | unknown     |

Figure 2: Arie Trouwborst, 2006

The threshold of uncertainty as a trigger for precautionary measures is quite a controversial topic in the literature. Its opponents argue that the principle does not define the level of required uncertainty for its application, whereas its advocates consider it as an eligible reason to take precautionary measures.<sup>498</sup> This statement implies that if there is no *uncertainty* then there is no *action* (precautionary action). However, this assertion does not reflect the main objectives of the several formulations of the principle, including the *Rio Declaration*, which clearly announced that a 'lack of scientific certainty shall not be used as a reason to postponing... measures to prevent environmental degradation'.<sup>499</sup> Therefore, action is triggered by the threat of environmental damage and not by uncertainty; uncertainty should not be used as a reason for not taking action. This view differs from the statement that uncertainty is the reason for taking action. The literature regarding the precautionary principle often refers to uncertainty as the condition for its application.<sup>500</sup> This statement means that if there is no uncertainty, there is no action, which has been argued to be a misrepresentation of the principle. Advocates of the principle argue that although it is a basic element,

<sup>496</sup> *Id.*

<sup>497</sup> *Id.*

<sup>498</sup> Tickner, J. et al., supra 494, p. 90.

<sup>499</sup> *Rio Declaration*, Article 15.

<sup>500</sup> Tickner, J. et al., supra 498, p. 92.



uncertainty is of secondary importance to the prevention of environmental damage.<sup>501</sup> The application of the principle is triggered by concerns over potential harm to the environment and not scientific uncertainty, as mentioned previously in this section. Therefore, according to Trouwborst, it is appropriate to say that the principle requires action *in spite of* uncertainty, and not *because of* it.<sup>502</sup> This notion is inherent in or explicitly evident from several articulations of the principle. For instance, when there is reason to assume that a threat of environmental harm, preventive action should be taken ‘*even when*’ there is scientific uncertainty.<sup>503</sup> Therefore, the principle appears to suggest that the threat of environmental harm should be avoided, regardless of the presence or absence of scientific uncertainty.<sup>504</sup> Thus, the precautionary action is triggered not by a certain level of uncertainty, but by the level of potential environmental damage.

Moreover, several formulations of the principle do not seem to choose a certain type of uncertainty, which appears to suggest that many kinds of uncertainty are acceptable. It seems rather impractical however to expect the principle to be applicable if there is a threat of environmental harm with any level of uncertainty. This notion would bring any action in the society to a standstill.<sup>505</sup> A duty to do the impossible can never be legally binding,<sup>506</sup> and zero risk is not a realistic goal, nor is it a goal of the precautionary principle.<sup>507</sup> It is true that uncertainty, as explained earlier, exists and is inevitable. However, it would be impossible for the promoter of an activity to prove with certainty that the activity is harmless when it might possibly have an adverse environmental impact. Therefore, there should be a threshold of proof beyond which the principle becomes applicable. Otherwise, based on the notion of precaution the principle would apply to any situation. This section does not only aim to demonstrate that the principle does not allow action under any level. It also aims to show that, as a principle of international environmental law, it provides certain thresholds for the level of uncertainty at which it becomes effective (within reasonable bounds).<sup>508</sup> Although the principle applies to all types of uncertainty, is it true to say that it also applies to all levels

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<sup>501</sup> Trouwborst, 2006, *supra* 119, p. 80.

<sup>502</sup> *Id.*

<sup>503</sup> 1992 *Baltic Sea Convention*, article 3(2); See also: 2002 ASEAN agreement on Trans boundary haze pollution, precautionary measures shall be taken in the case of serious and irreversible harm to the environment ‘even without full scientific certainty’; the same formulation appears in several other instruments such as 1992 OSPAR Convention article 2(2) a, the 1997 Trilateral Wadden Sea Plan paragraph 8, European Commission’s Communication COM (2000) p.13, etc.

<sup>504</sup> Trouwborst, 2006, *supra* 119, p. 94.

<sup>505</sup> Tickner, J. et al., *supra* 494, p. 12.

<sup>506</sup> *Id.* p. vi.

<sup>507</sup> Communication COM (2000)1, *supra* 25, pp. 9 and 18.

<sup>508</sup> Trouwborst, 2006, *supra* 119, p. 98.

of potential harm to the environment. Therefore, the question should not be how much uncertainty is required, but rather how much uncertainty is tolerable.<sup>509</sup> This can be found in international and national state practices. Is there any coherent pattern? Can purely hypothetical threats be sufficient as a basis? Without this, the remotest possibility of harm would be eligible as a basis to take action.

As there are certain thresholds for the *gravity* of harm (significant, serious or irreversible), there also exists a threshold, based on the international formulations of the principle, regarding the *likelihood* of harm. This threshold excludes certain levels of probability from the territory of the precautionary principle. In other words, not every possible environmental harm would trigger the precautionary principle. In fact, according to several formulations, there should be a *belief* that there is a threat to the environment for the principle to become applicable. In other words, *purely hypothetical* threats cannot trigger the precautionary action. The available evidence reflects a common ground among states that the precautionary principle is not applicable if there are no reasonable grounds.

To conclude, decision makers can take any environmental measures at their own discretion, but to justify them under the precautionary principle they have to prove that there is a certain gravity of potential harm, and also a certain likelihood. Accordingly, these two elements should be considered if a state's measure is being assessed as to whether it is a genuine environmental concern (under the principle). However, these thresholds only demonstrate an objective test. What does the application of the principle mean for an arbitrator, and how should the thresholds be applied in practice? How should they decide what is serious, significant or not significant? If we assume that we know what the thresholds are, the next important step is to know when they have been crossed. This process seems to be utterly subjective. Though some room for subjectivity might be expected, it needs to be narrowed down; there is no such thing as an authoritative manual on each of these thresholds.<sup>510</sup>

### **3.3.2.3 Action**

The previous two subsections examined the first two elements of the precautionary principle. Without the third element, which is precautionary action, the principle would be meaningless.<sup>511</sup> In other words, it is not sufficient to simply know the thresholds of

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<sup>509</sup> *Id.* p.99

<sup>510</sup> *Id.* p. 134.

<sup>511</sup> *Id.* p.147

the triggers for the precautionary principle. It is equally important, once the threshold has passed, to determine what kind of actions should be taken. Does the principle determine what action is warranted in the case of uncertainty over potential environmental harm, or does it all depend on the discretion of each state?

Effectiveness is one of the most fundamental requirements for any environmental policy regarding its compliance with the criteria of the precautionary principle.<sup>512</sup> This means that the measure or policy should effectively safeguard the environment from anticipated specific harm. This requirement has also been acknowledged by tribunals, and by several international instruments. The tribunal in the *Southern Bluefin Tuna* case, for instance, affirmed that the state should ‘act with prudence and caution to ensure that effective conservation measures are taken to prevent serious harm to the stock of Southern Bluefin Tuna’.<sup>513</sup> The Supreme Court of Pakistan, in its *Shebla Zia v WAPDA* judgment, stated that ‘effective measures’ should be taken to control environmental threats.<sup>514</sup> As explained by the European Commission’s Communication, ‘the measures envisaged must make it possible to achieve the appropriate level of protection’.<sup>515</sup> In other words, it should produce the desired outcome in protecting the environment, which depends on each specific situation.

Another concept that has particular importance for the precautionary principle, besides effectiveness, is the principle of proportionality. A precautionary measure or policy is proportional when it corresponds to the probability and gravity of the risk. This allows the avoidance of excessive risks, and works as a counterweight to effectiveness. According to Trouwborst, ‘effectiveness ensures that the relevant purpose is served; proportionality ensures that this is all that happens and no more than that, by adjusting the means to the objective’.<sup>516</sup>

It has also been argued that the thresholds of the precautionary principle are an expression of the idea of proportionality. The graver and more probable the risk, the more rigorous a measure it calls for.<sup>517</sup> In addition, ‘action will vary in accordance with

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<sup>512</sup> *Id.*

<sup>513</sup> *Southern Bluefin Tuna*, ITLOS, *infra* 749, paragraph 77; see also: 2002 *Antigua Convention* Article 5(6)(a): ‘effective measures to prevent environmental degradation’.

<sup>514</sup> *Shebla Zia v WAPDA*, PLD, 1994 SC 693, Supreme Court of Pakistan, Feb 12 1994. p. 709.

<sup>515</sup> COM(2000)1, *supra* 25.

<sup>516</sup> Trouwborst, *supra* 119, p. 149.

<sup>517</sup> *Id.* p. 151.

the severity of the risk'.<sup>518</sup> According to the EU Commission's Communication 'in some cases a total ban may not be a proportional response to a potential risk. In other cases, it may be the sole possible response.'<sup>519</sup> For instance, the long-term effects of a measure should be considered when evaluating proportionality, so that the immediate action required to prevent such risks can be counted.<sup>520</sup> Therefore, 'the greater the aggregate risk, the more rigorous the precautionary action to match it, and vice versa'. In general, precautionary policies or measures come in different forms. They include research, EIA, zoning decisions, shifting the burden of harmlessness to the proponents of potentially harmful activities, and – the most obviously precautionary measure – suspension. Depending on each situation and the risk involved, any one of these measures may constitute an appropriate implementation of the principle, providing that it complies with the requirements of effectiveness and proportionality.<sup>521</sup>

### 3.3.3 Status

There is an unconcealed disagreement among scholars regarding the status of the precautionary principle. Many authors have considered it to be binding by arguing that it is a customary norm of international law. This view is supported by many treaties in the field of international law, through their choice of language. Critics do not even consider it as a principle, however, and categorise it as an approach, being only a political decision-making instrument. Some other scholars have taken a middle ground by considering it as a declarative norm. The resistance comes from not considering precaution as an obligation. All objections have attempted to prove that the principle does not have the necessary content to make it an obligation and therefore no legal consequences would follow if it is not applied. However, if its role as a non binding principle was recognised, and scholars efforts to prove or disprove its binding character were instead devoted to studying how the principle is already working and its potential, it would be better appreciated. This issue is a matter of perception, and is partly due to the context in which it has been developed. The middle ground in this instance involves identifying the precautionary principle as a principle of interpretation. This does not create obligations of conduct for states, but regulates the manner of interpreting the

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<sup>518</sup> Commentary to Article 7 of the 1995 *Draft International Covenant on Environment and Development* (IUCN Draft Covenant),

<sup>519</sup> COM(2000)1, *supra* 25. p. 18.

<sup>520</sup> Marr, *The Precautionary Principle in the Law of the Sea*, 174, p. 36.

<sup>521</sup> Trouwborst, 'Prevention, Precaution, Logic and Law', p. 110.

obligations and rights that are designed to protect the environment and human health, creating legal uncertainty and scientific relevance.<sup>522</sup>

This research takes a position that the precautionary principle does not necessarily need to gain a binding nature to fulfil its purpose. Considering, first, as a norm or standard under environmental law, precautionary principle, as it is, a non-binding principle under international law is fully capable of fulfilling its purpose. This is due to the different law-making mechanism under environmental law and also having a task that requires enormous flexibility. In fact, instead of focusing on the status of the principle and making efforts to fit the principle in the conventional hard-law formulas, one should ask: what function do we want the precautionary principle to fulfil within the settlement of investment disputes? This question should remain at the forefront of the assessment of the principle's status.

The nature of the precaution as a principle and not rule does not diminish its impact and normativity. As Dworkin explains principle is:

a standard that is to be observed, not because it will advance or secure an economic, political, or social situation deemed desirable, but because it is a requirement of justice or fairness or some other dimension of morality.<sup>523</sup>

In its well-known article on 'the Model Rules', Dworkin differentiated between legal rules and legal principles and criticised the positivist approach towards making the rules the only source of legal obligations and suggested that:

The law includes principles as well as rules. Some principles are binding as law and must be taken into account by those who make decisions of legal obligation. It however cannot be binding as some rules are.<sup>524</sup>

In attempting to answer if the principle should be adopted based on an obligation, Bodansky claims that states do not *have to* adopt the principle, i.e. it is not an obligation. States do it 'because it represents the right approach to the problem of uncertainty'.<sup>525</sup> Moreover, the principle is not a rule, as it doesn't govern behaviour by defining precisely what is permissible and what is not. It is in fact a standard, which sets forth an open-ended test and channels future decision making, leaving a significant part of the

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<sup>522</sup> Di Benedetto, 'La Funzione Interpretativa Del Principio Di Precauzione In Diritto Internazionale'. Unofficial English translation.

<sup>523</sup> Ronald Dworkin, 'The Model Rules', *The University of Chicago Law Review*, 35.14 (1967), p. 23.

<sup>524</sup> Dworkin, p. 35.

<sup>525</sup> Daniel Bodansky, *Art and Craft of International Environmental Law* (USA: Harvard University Press, 2010), p. 201.

decision making process to the subsequent decision maker.<sup>526</sup> Standards such as precautionary principle influence the behaviour of states, courts and the development of the negotiations, since they:

do not directly guide behaviour, instead they set boundary conditions for the development of more precise behavioural rules. They serve to frame the debate rather than to govern the conduct. Although this role is more intangible and difficult to measure than of treaties, this does not mean that it is any less real.<sup>527</sup>

Thus, environmental standards such as the precautionary principle make recommendations and not legally binding decisions; they are normative since they are intended to guide or influence behaviour by providing reasons for action. These standards are a ‘social creation and the product of identifiable norm making, thus, as a non-binding and soft law principle it does not represent absence of law but rather a kind of purgatory’.<sup>528</sup>

To surmise, the current precautionary principle does not provide any rights or obligations; it provides the interpreter a new interpretation of the existing environmental protection instruments.<sup>529</sup> There remains, however, the possibility that it might become a binding legal instrument in the future. Therefore, this study attempts to develop a framework for a comprehensive and analytical reconstruction of the meaning of the principle, and its application in the context of investment law.

### 3.3.4 Functions of the Principle

The unique characterization of the precautionary principle allows it to function both at the procedural and substantive level. It has been argued that the importance of the principle is more procedural than substantive.<sup>530</sup> The principle imposes certain procedural obligations on decision-makers. However, based on extensive analysis of the principle in chapter two, this research argues that the precautionary principle is not only an essential procedural tool in the hands of the tribunals,<sup>531</sup> it can also have a substantive role in informing their interpretation of certain obligations. Thus, both procedural and substantive functions of the principle will be addressed in this study.

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<sup>526</sup> *Id.* p. 201.

<sup>527</sup> *Id.*

<sup>528</sup> *Id.* p. 99.

<sup>529</sup> Di Benedetto, ‘La Funzione Interpretativa Del Principio Di Precauzione In Diritto Internazionale’. Unofficial English translation.

<sup>530</sup> Lesley McAllister, ‘Judging GMOs: Judicial Application of the Precautionary Principle in Brazil’, *Ecology Law Quarterly*, 32.1 (2005), 149 (p. 157).

<sup>531</sup> Lesley McAllister, ‘Judging GMOs: Judicial Application of the Precautionary Principle in Brazil’, *Ecology Law Quarterly*, 32.1 (2005), 149 (p. 166).

### 3.3.4.1 Procedural: Shifting the burden of proof

According to the traditional legal standards in the area of environment, and general rules on the burden of proof, conductors of new technologies and activities have ignorance on their side, therefore their activity or product is safe unless proven otherwise.<sup>532</sup> The idea of setting the burden of proof and the status quo is to bring stability and consistency in the law.<sup>533</sup> According to Harding and Fisher, the general rule and status quo in the field of environment is:

Where scientific uncertainty exists concerning possible harmful impacts of a development it has traditionally been left to those suggesting harm to demonstrate *its likelihood convincingly*, rather than those carrying out the development to demonstrate with a *high level of confidence that harm will not occur*.<sup>534</sup>

Opponents of the principle include those who are benefiting from the *status quo* of the burden of proof, which requires decisions to be based on scientific proof – to establish the harm and causal link convincingly. This is different from the perceived risks identified by the principle, which, according to them, have no sound scientific basis, unnecessarily paralyse innovation and are therefore ‘anti-scientific’.<sup>535</sup>

Following this line of argument, Ambrus has argued that the main trigger of the shift in the burden of proof is the inherent need to achieve fairness.<sup>536</sup> The traditional purpose of the burden of proof is maintaining the *status quo* to bring consistency.<sup>537</sup> This would result in allowing pollution in the guise of protecting the status quo, for examples. As Olson remarked:

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<sup>532</sup> James Cameron, ‘The Precautionary Principle: Core Meaning, Constitutional Framework and Procedures for Implementation’, in *Perspectives on the Precautionary Principle*, Ronnie Harding and Elizabeth C. Fisher (Leichhardt: Federation Press, 1999), p. 46.

<sup>533</sup> Scott.

<sup>534</sup> Ronnie Harding and Elizabeth C. Fisher, ‘Introducing the Precautionary Principle’, in *Perspectives on the Precautionary Principle* (Leichhardt: Federation Press, 1999), p. 3. [emphasis added.]

<sup>535</sup> For the argument that precautionary principle is anti scientific see: Gray. Scott claims that the burden should shift towards those who created hazard to the environment. She reasoned that *status quo* is a matter of perspective and not an ethically neutral doctrine. According to the conventional *status quo*, new activity does not harm the environment. Whereas the Risk averse society’s *status quo* demands whoever introduces new risks bears the burden of proving its safety. This could also cover those risks that managed to slip by and bypass the supervision of the authorities. Another justification for changing the *status quo* is the asymmetries of information. This means that those in control who have the economic incentive and information should bear the burden of providing proof that according to their data, the activity does not pose serious and irreversible treat to the environment. Finally, she suggested that equity considerations and fairness could determine the party responsible to prove since it is in possession of resources and power. (

<sup>536</sup> Monika Ambrus, ‘The Precautionary Principle and a Fair Allocation of the Burden of Proof in International Environmental Law’, *Review of European Community & International Environmental Law*, 21.3 (2012), 259–70 (p. 260).

<sup>537</sup> James M. Olson, ‘Shifting the Burden of Proof: How the Common Law Can Safeguard Nature and Promote an Earth Ethic’, *Environmental Law*, 20 (1990), 891 (p. 915).

Shifting the burden of proof does nothing more than internalize the costs, risks and uncertainty of hazardous products or by-products to those who have the information, expertise and control in the first instance.<sup>538</sup>

Moreover, putting the burden on those that pose a threat to the environment, and requiring them to demonstrate safety and harmlessness, could act as an incentive to reduce the risks from their activities.<sup>539</sup> This has also been acknowledged by Nollkaemper, who claimed that shifting the burden would ‘induce prevention’<sup>540</sup>.

The environment is affected by significant amount of uncertainty, and so shifting the burden of proof is highly determinative of the outcome of disputes.<sup>541</sup> However, it is important that proving safety is proving a negative matter, which is logically impossible. This is the main practical criticism of changing the burden of proof in environmental cases.<sup>542</sup> This problem also has been acknowledged by advocates of the change, yet their argument is that changing the burden is not equal to proving safety. The conductor of an activity is not asked for *scientific proof of safety*, but instead should demonstrate *evidence of the absence of harm*.<sup>543</sup> These two concepts are completely different. In other words, safety can not be proven, but it is possible, and in fact a common practice, to provide some evidence that the proposed activity does not exceed the prearranged thresholds for being harmful. The idea is not a mere theoretical allegation for the shifted burden; it is already being applied in the field of environmental law, which corresponds to the idea that the precautionary principle is being applied without demanding proof of safety.<sup>544</sup> Fracking (hydraulic Fracturing) is one of the most recent concerns that have been raised in several countries.<sup>545</sup> In the Netherlands for instance, there is currently a moratorium on shale gas exploration, and unless an environmental impact study is conducted, the

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<sup>538</sup> *Id.*

<sup>539</sup> Carl F. Cranor, *Regulating Toxic Substances: A Philosophy of Science and the Law*, Revised ed. edition (New York: Oxford University Press, 1997), p. 86.

<sup>540</sup> Andre Nollkaemper, ‘What You Risk Reveals What You Value and Other Dilemmas Encountered in the Legal Assaults on Risks’, in *The Precautionary Principle and International Law: The Challenge of Implementation*, ed. by David Freestone and Ellen Hey (Kluwer Law International, 1996), p. 73 (p. 85).

<sup>541</sup> Bodansky, ‘The Precautionary Principle in US Environmental Law’, p. 212.

<sup>542</sup> Aaron Wildavsky, *But Is It True?: A Citizen’s Guide to Environmental Health and Safety Issues* (Cambridge, Mass.: Harvard University Press, 1997), p. 430.

<sup>543</sup> Kriebel and others, ‘The Precautionary Principle in Environmental Science.’ *Environmental Health Perspectives*, 109.9 (2001), 871–76 (p. 873); See also: in the statement of defense by Canada as well as the dissenting opinion by judge McRae in *Bilcon Delaware*, supra, 253.

<sup>544</sup> *Id.*

<sup>545</sup> ‘Keep Tap Water Safe’ maintains a state-by-state, up-to-the-minute list of actions passed against fracking in the U.S. and worldwide. According to the latest updates. It demonstrates the concerns over fracking by municipalities and states that led to a ban or moratorium due to the lack of sufficient information or lack of transparency. Available at: <<http://keeptapwatersafe.org/global-bans-on-fracking/>>.



permission for exploration will not be granted.<sup>546</sup> The *Oslo commission* provides another example of demanding the developer of a potentially harmful activity to bear the burden of proof. This commission established a procedure under which aircraft and ships are granted permission to dump waste in the sea only after they have demonstrated that a set of harm thresholds would not be exceeded.<sup>547</sup> In addition, an amendment to the *whaling commission* in 1979 adopted a moratorium prohibiting whaling unless the whalers present sound evidence that there is no threat to the whale species concerned. Only then could the activity be resumed without harm.<sup>548</sup> Other examples include the undesirability of driftnets unless proven otherwise, the reverse listing of products that require permits for certain substances or activities that are potentially harmful, and also the obligation of conducting an EIA. All of these measures are inherently precautionary, however, it should be noted that states, in order to require evidence of harmlessness, should establish some reasons to suspect harm. This is to entitle the threat to be considered potentially harmful under the requirement of the precautionary principle. These examples validate the ability of precautionary principle to shift the burden, and show that the task is far from demanding the impossible.

To tie this section to the main purpose of this thesis it is important to understand what the idea of precautionary burden shifting means in environment-related investment disputes. In investment disputes, the foreign investor always makes the claim and initiates the dispute, due to its peculiar characteristics. Therefore, host states that claim that an investor's activity poses an environmental threat do not bear any burden in the beginning. Instead, the investor has to prove and establish a breach of an investment provisions. If the host state claims that a measure was adopted due to the threat of harm to the environment, then it has to prove that the regulation was genuine, and that there was a threat of potential environmental harm. In this scenario there seems to be no burden shifting, and each party bears the burden of establishing its claim/allegation (burden of production). Ergo, even if the tribunal accepts the argument by the decision

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<sup>546</sup> Letter from the Netherlands Ministry of Economic Affairs to the Parliament regarding a Moratorium on Shale Gas exploration, 18 Sep, 2013. Available at: < <http://shalegas-europe.eu/update-will-netherlands-lift-moratorium-begin-exploration/>>. Several other countries including United States have put moratorium on shale gas in order to ensure its safety.

<sup>547</sup> 'Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircraft', Oslo, Feb 1972, 932 U.N.T.S. 3. Art. 16. Available at: < <http://sedac.ciesin.org/entri/texts/marine.pollution.dumping.ships.aircraft.1972.html>>.

<sup>548</sup> 3<sup>rd</sup> Annual meeting of the International Whaling Commission, the Amendments to the Schedule of the International Convention for the Regulation of Whaling, 13 July 1979. Available at: < [http://iea.uoregon.edu/pages/view\\_treaty.php?t=1979-AmendmentsScheduleM31-1946-Whaling.EN.txt&par=view\\_treaty\\_html](http://iea.uoregon.edu/pages/view_treaty.php?t=1979-AmendmentsScheduleM31-1946-Whaling.EN.txt&par=view_treaty_html)>.

maker (the host state in this scenario), and acknowledges the precautionary decision-making, the host state still has to establish a threat to the environment that triggered the regulation. In other words, it has to prove that it had reasonable grounds to suspect that there was a 'significant', 'serious' or 'irreversible' threat of harm to the environment.

One could argue that shifting burdens using the precautionary principle would excuse the host state from proving a causal link, i.e. convincingly proving harmfulness or providing conclusive scientific evidence. However, the state *still* has to establish a threat. Therefore, applying the principle does not shift the burden, but instead lowers the threshold. This makes it easier for the respondent to prove that its measure has been fair and equitable, or nondiscriminatory etc. This demonstrates the principle's potential capacity to act as a balanced tool, one that not only allocates the burden of proof according to fairness and recognizes the vulnerability of the environment, but also sets a threshold for implementation, and requires the applicant of the principle to meet the threshold.

Consequently, many assumptions that were made by the foreign investors in the second chapter could be affected by application of this principle.<sup>549</sup> There are several arguments that foreign investors have claimed to be illegitimate regulatory measures, and therefore breaches of investment treaties. One example is an argument concerning an environmental permit that was not extended by the authorities. If there are reasonable grounds for concern that its activity poses significant, serious or irreversible harm to the environment, which is based on scientific information but not scientifically proven, there is not an immediate causal link between the harm and the activity. In addition, if the community protested against development when it felt the threat, they are in fact recognized in environmental law under the precautionary principle.

Therefore, if the host state proves existence of a threat to the environment, previous scenarios could be justified under the principle. At this stage, when the threat of harm is established, the burden is on the foreign investor to prove that its action is not harmful to the environment if it wants to prove the violation of investment standards. Therefore, even if the burden to prove harm may have shifted, the burden to prove the existence of a threat still lies with the host state.<sup>550</sup> According to Scott, the idea that the

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<sup>549</sup> David Farrier, 'Factoring Biodiversity Conservation into Decision-Making Processes: The Role of the Precautionary Principle', in *Perspectives on the Precautionary Principle*, ed. by Elizabeth C. Fisher and Ronnie Harding (Federation Press, 1999), p. 108.

<sup>550</sup> Wynne and Mayer, *supra*, 393, p. 32.

burden may not be shifted according to precautionary principle is only created by our 'imagination', and there is no such limitation in law.<sup>551</sup>

Recent dissatisfaction with the design of risk assessment, chiefly in the area of the environment, has caused rejection of the idea that all scientific certainties are reliable and controllable.<sup>552</sup> In other words, the idea of a world that is 'determinate (ultimately knowable) and probabilistic (calculable)' has been widely rejected.<sup>553</sup> As a result, the precautionary principle has emerged as a response to the limitations of science and the ways it is applied to environmental issues.<sup>554</sup> Its advocates argue that if we are ignorant, why should this work against the environment. Instead the benefit of doubt should be granted to the environment. Moreover, permissive environmental regulation is no longer desirable or effective, since it cannot address the inherent uncertainty and indeterminacy of scientific studies. 'Rigorous science' recognizes the need to take uncertainty into account. However it is not only for the scientists and decision makers to acknowledge this fact but also for the judiciary. As stated by M'Gonigle *et al*:

The judiciary must be more cognizant of the implications of scientific uncertainty in order to respond realistically and imaginatively to problems of causation. Reallocating the burden of proof from the environmental management agencies or public to the polluter, and setting appropriate standards of proof, are important ways to begin.<sup>555</sup>

Strong precaution is often associated with the placement of the burden of proof.<sup>556</sup> A critique of the principle mentioned that shifting the burden of proof towards the manufactures is like 'demanding a new-born baby prove that it will never grow up to be a serial killer...' and that zero risk is 'unattainable', 'undesirable'. It is also important to remember that safe is not equivalent to risk-free.<sup>557</sup> While some versions of the precautionary principle have been argued to shift the burden of proof from the opponent of the activity (with potential threats to the environment) to the conductor of the activity, there is no consensus over this particular issue. This is because the shift of burden argues that proving safety is proving negative, and is therefore logically

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<sup>551</sup> Scott. P.59.

<sup>552</sup> Carolyn Raffensperger and Katherine Barrett, 'Precautionary Science', in *Protecting Public Health and the Environment: Implementing the Precautionary Principle*, C. Raffensperger and J. Tickner (Washington, D.C: Island Press, 1999), p.113.

<sup>553</sup> *Id*.

<sup>554</sup> Scott. 2005, p.52.

<sup>555</sup> R. Michael M'Gonigle and others, 'Taking Uncertainty Seriously: From Permissive Regulation to Preventative Design in Environmental Decision Making', *Osgoode Hall Law Journal*, 32 (1994), p. 169.

<sup>556</sup> Weiner and rogers 2002/ Hohmen 1994.

<sup>557</sup> Noah 1311, also See Indus. Union Dept. v. Amer. Petroleum Inst. 448 U.S. 607,642 (1980).

impossible.<sup>558</sup> In other words, it would be impossible to prove that going forward with an activity will cause no harm or no risk, since zero risk does not exist. The advocates of this power of the principle argue that it is required for effective management of the environment.<sup>559</sup> According to Di Benedetto, the argument of zero risk falls into a kind of new positivism of backward-looking matrixes. This means that giving legal weight to each uncertain risk would return to the paradox of a new legal certainty, according to which any doubt leads to inaction. Therefore, instead of the reverse burden, a more nuanced position would be that the precautionary principle implies alleviating the burden of proof, which is still in the hands of those who claim that there is a risk. This is a convincing reconstruction, which fully enhances the element of scientific uncertainty without upsetting the classic procedural structure. In this way the precautionary principle, as a new way of thinking, affects the content of the evidence that must be taken, and opens the legal experience to the understanding of human limitations in knowing clearly the effects of new technologies.<sup>560</sup>

Moreover, EU case law has also touched upon the application of the principle in procedural matters such as the burden of proof. In the practice of EU laws there are ample instances of the special burden of proof, as apposed to the general one, and shifting the evidentiary requirement in favour of the environmental caution<sup>561</sup>. Furthermore, the precautionary burden of proof has also found its way into the jurisprudence of the EU.<sup>562</sup>

In the *Pfizer* case, for instance, the company who was affected by the regulation requested the community to provide ‘proof of the reality or the seriousness of the risks’ in the contested product.<sup>563</sup> The court rejected the claim, and stated that it is adequate for the community to demonstrate that it has conducted ‘as thorough a scientific risk assessment as possible’. Based on this it had ‘sufficient scientific indications’ to conclude, on an ‘objective’ scientific basis, that the use of the contested product

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<sup>558</sup> See :Aaron Wildavsky, *But Is It True?: A Citizen's Guide to Environmental Health and Safety Issues* (Cambridge: Harvard University Press, 1997), p. 439.

<sup>559</sup> For example: (COM (2000) 1), supra 118.

<sup>560</sup> Saverio di Benedetto, supra 440..

<sup>561</sup> See Article 7 of Directive 67/548 on the Approximation of the Laws, Regulations, and Administrative Provisions of the Member States Relating to the Classification, Packaging, and Labeling of Dangerous Substances, OJ, 1967, L 196, p. 1.; Commission of the European Communities (2007) Regulation (EC) No 1907/2006 of the European Parliament and of the council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH); (COM (2000) 1), supra 118. p.21.

<sup>562</sup> Trouwborst, *Precautionary Rights and Duties of States*, supra 119, p. 212.

<sup>563</sup> ECJ 11 September 2002, Case T-13/99, *Pfizer*, [2002] ECR II-3305, para.164

constituted a risk to human health.<sup>564</sup> The court further explained that in agricultural policy there exists a wide discretion for the public authority to decide on the ‘objectives to be pursued and choice of the appropriate means of action’.<sup>565</sup> In addition, this also determines the level of risk deemed unacceptable for society.<sup>566</sup> Therefore, when institutions are required to provide a scientific risk assessment and to ‘evaluate highly complex scientific and technical facts’,<sup>567</sup> the judicial review is limited to finding out whether there has been a ‘manifest error’, a ‘misuse of powers’ or the institutions have clearly ‘exceeded the bounds of their discretion’.<sup>568</sup> The Community judicature, thus, is not entitled to substitute its assessment of the facts for that of the Community institutions.<sup>569</sup>

The ECJ was asked for a preliminary ruling regarding the interpretation of a provision in the *Bird's Directive*.<sup>570</sup> One of the questions concerned whether the Directive allowed national authorities to fix the closing date for hunting.<sup>571</sup> The ECJ decided that the directive does not empower the authorities for such action *unless* the concerned member state can demonstrate, based on scientific and technical data relevant to each individual case, that the closing dates for hunting do not impede the complete protection of the species of bird affected.<sup>572</sup> The influence of the principle in interpreting the directive’s provision and the shift in the burden of proof was later the main factor of the court’s interpretation on the *Waddenzee* case in 2004.<sup>573</sup> In this case, the ECJ applied a reversal of the burden of proof as there was doubt regarding the environmental effects of the project. They achieved this by requiring the applicants to demonstrate that no harm would be caused under the Habitat Directive. The Court held that a risk of significant effects to the mechanical fishery on the area exists if ‘it cannot be excluded on the basis of objective information that the plan or project will have significant effects on the site

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<sup>564</sup> Id. para. 165

<sup>565</sup> Id. para.166

<sup>566</sup> Id. para.167

<sup>567</sup> Id. para.169

<sup>568</sup> Id. para.166

<sup>569</sup> ECJ 11 September 2002, Case T-13/99, Pfizer, [2002] ECR II-3305, para.169; This decision was Followed by the subsequent cases; Case 98/78 Racke [1979] ECR 69, paragraph 5; Case 265/87 Schröder [1989] ECR 2237, paragraph 22; Joined Cases C-267/88 to C-286/88 Wuidart and Others [1990] ECR I-435, paragraph 14; Fedesa and Others, cited at paragraph 115 above, paragraph 14; the BSE judgment, cited at paragraph 114 above, paragraph 60; and the NFU judgment, cited at paragraph 114 above, paragraph 39.

<sup>570</sup> Article 7(4) of Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds (Official Journal 1979 L 103, p. 1) (hereinafter ‘the Directive’)

<sup>571</sup> Case C-435/92 , Association pour la protection des animaux sauvages e.a. v Préfet de Maine-et-Loire et Préfet de Loire Atlantique [1994] ECR I-67. 19 January 1994. para. 14.

<sup>572</sup> Case C-435/92. para 22.

<sup>573</sup> ECJ 7 September 2004, Case C-127/02, *Waddenzee*, [2005] ECR I-6515.

concerned.<sup>574</sup> The Court recognized the need for the shift of the general evidentiary requirement, and interpreted that:

in the light of the site's conservation objectives, are to authorize such an activity only if they have made certain that it will not adversely affect the integrity of that site, that being the case if there remains no reasonable scientific doubt as to the absence of such effects.<sup>575</sup>

#### ***3.3.4.2 Substantive: Guiding Interpretation***

The present study's argument to apply precautionary principle through its substantive function is linked to treaty interpretation. It recognized that, in light of the open-textured nature of the various substantive standards provided in an investment treaty, the identification of the 'object and purpose' of investment treaties represents a crucial element in imparting meaning to these standards.<sup>576</sup> This also acts as a relevant principle of international law applicable between the parties.

Chapter four is devoted to analyzing how different courts and tribunals have addressed the precautionary principle. The purpose of this section, however, is not to identify how other tribunals had used the principle in using the same reasoning for interpreting investment provision. This is simply not realistic, due to the completely different context of the disputes, the constitution of the tribunals, the different objectives and specifically the different role for the precautionary principle in each of the tribunals in the following chapter. Instead, the idea is to examine the potential applicability of the principle by building on its core elements, which are identified in the present chapter and complemented by the next chapter on jurisprudence. Thus, the chapter four is an extension of the analytical framework, and analyses the jurisprudence on the precautionary principle. It concludes by synthesizing both chapters and introducing the 'precautionary test' as its outcome.

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<sup>574</sup> *Id.* para.41

<sup>575</sup> *Id.* para.67.

<sup>576</sup> Ortino, *supra* 97, p. 11.

## 4 The precautionary principle in international case law

### 4.1 Introduction

Chapter three addressed the peculiarities of the environmental concerns, and the ways in which these concerns are addressed under environmental law. However, it left open the practice of courts, and how the precautionary principle has been applied in dispute settlement. This chapter can therefore be seen as a continuation, as it further develops the characterization of the principle extracted from jurisprudence. In addition, the analysis is an important step in the study of the interpretative function of the precautionary principle, which will be discussed in chapter five of this study. It has been argued that tribunals that are assigned to settle environment-related investment disputes should be aware of these processes when evaluating the legitimacy of policies and measures. Moreover, the previous chapter discussed the emergence of the precautionary principle as an instrument to respond to the uncertainty of science in addressing environmental problems.<sup>577</sup> This chapter aims to extract how the precautionary principle and its core elements operate in practice to assist courts and tribunals in evaluating states' environmental policies. In addition, the chapter features a close analysis of the decisions, which demonstrates how the same line of thinking could be incorporated by the investment tribunals. This mostly concerns decisions in which precautionary thinking played a role in settling the dispute, regardless of whether it was explicitly mentioned.

This chapter will also closely scrutinize the decisions of four different international courts and tribunals, including the decisions by European Union courts, the International Court of Justice, the International Tribunal for the Law of the Sea and dispute settlement bodies under the World Trade Organization Agreement. There are other tribunals who may have faced disputed that the precautionary principle could be relevant. However, these four tribunals are selected firstly because of the cluster of important cases dealing with the issue of precautionary principle that might have been raised by the parties or referred to by the tribunals. On the other hand, in majority of these cases, there is a tension between economic interests and environmental protection that make the principle relevant and also could provide a background to the issues raised under this thesis that is environment related investment disputes.

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<sup>577</sup> See, Foster, *Science and the Precautionary Principle in International Courts and Tribunals: Expert Evidence, Burden of Proof and Finality*.

The purpose of looking into these cases is to find out how the contending parties to the disputes have invoked the precautionary principle. It is also important to observe whether and how the dispute settlement bodies have implemented the principle.

## 4.2 *EU Jurisprudence*

The European Union (EU) has emerged as the ‘global leader in international environmental politics’ during the past two decades.<sup>578</sup> Therefore, it has taken the lead in developing its standards in regulatory policies. As a result of this initiation, the EU has established a solid platform in the EC Treaty, particularly for application of the precautionary principle. This has granted the adjudicatory system the power to elaborate on these standards. Through this exercise, the EU has now built up a ‘reservoir of credibility’ in the area of precautionary principle.<sup>579</sup>

Article 174 of the EC Treaty lays down the precautionary principle, among other principles of environmental law, and calls for the Community policies to comply with some of the main international environmental principles. It reads as follows:

Community policy on the environment *shall* aim at a high level of protection into account the diversity of situations in the various regions of the Community. It *shall* be based on the *precautionary principle* and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay.<sup>580</sup>

This article is the sole treaty provision embodying the precautionary principle. The provision was proclaimed among other environmental principles, but was not defined. This might be because the application of this principle is very contextual, due to the wide range of policies that it could address.<sup>581</sup> Therefore, the European Commission has produced a document as a guideline for decision-makers to fill the gap and further clarify and operationalize the precautionary principle.<sup>582</sup> It provides information on how the Community applies the principle when it comes to making decisions and taking action, or to controlling the risk. According to the Communication, precaution is a risk management tool, and is part of the risk analysis framework. Although the Communication represents a soft law instrument, it is not devoid of legal effects. In

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<sup>578</sup> R. Daniel Kelemen, ‘Globalizing European Union Environmental Policy’, *Journal of European Public Policy*, 17.3 (2010), 335–49 (p. 336). However, in the area of precautionary principle it has been disputed that EU is not necessarily more precautionary than US which is recognized as one of the main critics of the principle: Jonathan B. Wiener and Michael D. Rogers, ‘Comparing Precaution in the United States and Europe’, *Journal of Risk Research*, 5.4 (2002), 317–49 (p. 318).

<sup>579</sup> *Id.*

<sup>580</sup> Article 174 .2, Former article 130r-EC (before Maastricht consolidated version)

<sup>581</sup> de Sadeleer, ‘The Precautionary Principle as a Device for Greater Environmental Protection: Lessons from EC Courts’, p. 3.

<sup>582</sup> (COM (2000) 1), *supra* 25.



fact, the Court of First Instance (CFI) recognized the legal consequences of the Communications in the form of guidelines, and stated that the *court* will define whether the disputed measure ‘is *consistent* with the guidelines that the institutions have laid down for themselves by adopting and publishing such communications’.<sup>583</sup>

Examining the principle in the EU is important not merely for its inclusion in the main treaty and the secondary law, but primarily for the case law regarding its use. This has complemented the principle by attempting to define and set a practical threshold for its application in numerous cases. The principle has not been defined, and is also not given a threshold, in the treaty text provided in the Communication. Instead, the decision makers and the courts are left to flesh out the content of the principle. Its scope, to some extent, depends on social and political factors in a cases-by-case basis.<sup>584</sup>

Nevertheless, even within the EU system, the principle is still an area for controversy. It has raised questions among scholars as to whether the principle is a general principle of community law. Some contend that it is merely a limited sector-specific principle, which is only applicable in environmental policy. Furthermore, there is debate as to whether its application is only limited to the community institutions, according to the wording of the treaty provision.<sup>585</sup> This section, however, will focus more on how EU case law has expanded the application and operationalization of the principle by elaborating on its content.

After the *Maastricht Treaty* the principle was raised up to the same status of other environmental principles in article 174 (2). This article forces the institutions to base their environmental policies and decisions on principles drawn from international environmental law.<sup>586</sup> Its broad scope and ‘autonomous character’, according to case

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<sup>583</sup> T-13/99. *Pfizer Animal Health SA v. Council of the European Union*, [2002] ECR II-3305. para 119: ‘There is certainly settled case-law to the effect that the Community institutions may lay down for themselves guidelines for the exercise of their discretionary powers by way of measures not provided for in Article 189 of the EC Treaty (now Article 249 EC), in particular by communications, provided that they contain directions on the approach to be followed by the Community institutions and do not depart from the Treaty rules... In such circumstances, the Community judicature ascertains, applying the principle of equal treatment, whether the disputed measure is consistent with the guidelines that the institutions have laid down for themselves by adopting and publishing such communications.’ (However the court did not adopt the guidelines provided in the communication since at the time of the judgment the communication was still a ‘discussion paper’ and had not yet turned into the communication. *Id.* para 121.)

<sup>584</sup> COM (2000) 1. *supra* 25, Article 3.

<sup>585</sup> For the discussion on the precautionary principle at EU level: Nicolas de Sadeleer, ‘The Effect of Uncertainty on the Threshold Levels to Which the Precautionary Principle Appears to Be Subject’, in *Environmental Law Principles in Practice* (Bruylant, 2002); Nicolas de Sadeleer, ‘The Precautionary Principle in EC Health and Environmental Law’, *European Law Journal*, 12.2 (2006), 139–72.

<sup>586</sup> de Sadeleer, ‘The Precautionary Principle as a Device for Greater Environmental Protection: Lessons from EC Courts’, *supra* 581. p. 3. To determine the legal status of the principle according to the Treaty text, it should be defined *who* is legally obliged by the Principle and *when* it becomes an obligation. First of all, according to the text of the article 130r, the precautionary principle is only binding on the institutions.

law, enables the principle to act as a general principle of community law.<sup>587</sup> In fact, the extension of its application as an environmental principle to the protection of human health is a testament of its generality and autonomous character.

Due to its lack of definition in the legislative texts of the EU, the judicial body is left to define the content and criteria for the application of the principle.<sup>588</sup> Cases that have been brought before the European Court of Justice (hereinafter ECJ) and the General Court (hereinafter GC) have allowed the application of the principle to be reviewed.<sup>589</sup>

The cases below explain how the principle has been elucidated and broken down into more precise legal obligation through the interpretations made by the EU courts. EU case law has been carving out the implementation of the principle.

Be that as it may, different factors might influence the approach of the courts in adopting either a narrow or broad interpretation of the precautionary principle. On the one hand, it is important to be cognizant of whether a dispute concerns health or protects the environment.<sup>590</sup> Also, it is important to understand whether the claimant is an individual, a member state or the Commission.<sup>591</sup> These factors are important in

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The text is 'indicative' rather than 'conditional', therefore binding, although it allows for the ability of departure under certain conditions. This should mean that the member states action couldn't be reviewed on the basis of article 130r, i.e. member states do not have a legal duty under the treaty to apply precautionary principle. Nevertheless, in the fields that Harmonized by secondary law, the precautionary principle could be applied *directly*, if the secondary law explicitly includes precautionary principle for the specific purpose of that directive. Plus, *indirectly*, so far as article 10 EC imposes obligations on member states to 'take all appropriate measures' to ensure that the duties arising from the treaty and reading this provision are in light of the article 130r EC which imposes wide-ranging obligations on the member states to protect the environment. In other words, the states have an indirect duty to take precautionary measures when it is necessary to protect the environment. However in the case of free movement of goods, ECJ has used the precautionary principle to delimit the obligation of the states when they use the safeguard clauses enshrined in secondary law (See, *Monsanto Agricoltura Italia*, [2003] ECR I-8105.). On the other hand, although the member states are not obliged to apply the precautionary principle out of the community law, nothing prevents them to do so and justify their measures under article 30 EC. Ultimately, the principle is not binding on the member states in areas that the laws are not harmonized under the article 130r.

<sup>587</sup> *Artogodan GmbH and Others v Commission*, supra **Error! Bookmark not defined..** para. 184.

<sup>588</sup> COM (2000) 1. Supra, 25. p.10.

<sup>589</sup> *Id.*

<sup>590</sup> de Sadeleer, 'The Precautionary Principle in EC Health and Environmental Law', supra 585 p. 140. While in the text of the EC Treaty the principle is dictated to inform the environmental protection law and policies, in the EU case law, it has been appeared mainly in the context of the health and safety rather than the environmental protection. When appraising the precautionary principle, particularly in the realm of European Community, one should be aware of the fine line between the issue of health and safety and environmental concerns. This is due to the different nature and accordingly level of scientific knowledge in each category. While the scientific knowledge and evidence in health and safety is quite advanced, uncertainty has been accepted and acknowledged in the environmental cases due to the complexity of the ecosystem and the difficulties of predicting its reactions to ecological risks. In this regard, it might be possible that having a well-founded science in the health and food safety sector, has led to an explicit recognition of the principle in the regulations in this field, while among environmental directives and regulations, only few have mentioned and defined the principle in their operative parts'.

<sup>591</sup> *Id.* p. 178. 'Different consequences ensue from recourse to the precautionary principle depending on whether it is the member state or the commission who has invoked and relied on the principle. In other

understanding that the application of the precautionary principle might differ according to the nature of the dispute and the parties involved.

When settling cases on health and environmental protection, European courts are mostly asked to weigh the measures **against the economic consequences** that they might cause. Therefore, EU case law provides evidence as to how the precautionary principle could play a key role in tipping the balance between the two interests.<sup>592</sup> In any case, according to Article 30 of the EC Treaty,<sup>593</sup> and case law, the measure should correspond to the general interest, here the protection of the environment. It also should not impose an intolerable interference with the very substance of the guaranteed rights.<sup>594</sup>

In the *Danish bees* case for instance, the ECJ ruled in favor of the prohibition by the Danish government on the import of any species of bee other than the endemic subspecies, the brown bee, on the Danish island of Laeso.<sup>595</sup> The measure involved a prohibition on importation, and thus had an equivalent effect contrary to Article 30 of the Treaty. Danish authorities could not establish conclusively the nature of the particular sub-species, nor could they determine its risk of extinction. Nevertheless, the measure was justified by the ECJ under article 30 EC.<sup>596</sup> The Court considered that:

Measures to preserve an indigenous animal population with distinct characteristics contribute to the maintenance of biodiversity by ensuring the survival of the population concerned. By so doing, they are aimed at protecting the life of those animals and are capable of being justified under Article 36 of the Treaty.<sup>597</sup>

This could be an instance in which the precautionary principle has assisted the courts in justifying the measures, which were imposed to protect the environment to the detriment of certain economic rights. The principle has helped to reduce the hurdle of conclusive scientific evidence for the EC and member states.

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words, based on the answer to whether the dispute is between a private party/institution and an EU institution or the case is brought by the commission against a member state, the courts' intensity of review could be different'.

<sup>592</sup> de Sadeleer, 'The Precautionary Principle as a Device for Greater Environmental Protection: Lessons from EC Courts', supra 581. p. 4.

<sup>593</sup> The provisions of Articles 28 and 29 shall not preclude prohibitions or restrictions on imports, exports or goods in transit justified on grounds of public morality, public policy or public security; the protection of health and life of humans, animals or plants; the protection of national treasures possessing artistic, historic or archaeological value; or the protection of industrial and commercial property. Such prohibitions or restrictions shall not, however, constitute a means of arbitrary discrimination or a disguised restriction on trade between Member States.

<sup>594</sup> Case C-293/93, Standley, [1999] ECR I-2603, para. 54.

<sup>595</sup> Case C-67/97, Bluhme, [1998] ECR I-8053.

<sup>596</sup> Id. paras. 33,37 and 38.

<sup>597</sup> Id. para. 33.

In the *Toolex* case, the Swedish authorities banned a chemical substance, Trichloroethylene, which was claimed to be against the EU harmonization standards.<sup>598</sup> The measure caused economic restrictions by obstructing the free movement of the product in the market.<sup>599</sup> This case is significant because the court did not explicitly mention the precautionary principle, but did recognize the anticipatory action by the decision maker in the case of scientific uncertainty. It also justified the ban on the grounds of protection of human health, under article 30 EC. It held that ‘taking account of the latest medical research on the subject, and also the difficulty of establishing the threshold above which exposure to trichloroethylene poses a serious health risk to humans, given the present state of the research’.<sup>600</sup> Moreover, the court considered that it was impossible to argue that the adopted measure goes beyond the requirements of necessity. They therefore found it to be compatible as long as it is effective, and stated that the measure was necessary to effectively protect health and the environment, despite the uncertainty.<sup>601</sup> In this case, Advocate-General Mischo affirmed that the genuine and recognized dangerous nature of the product eliminated the possibility of any disguised restriction of trade.<sup>602</sup> Indeed, the ECJ made a rather restrictive interpretation of the EU regulation in this case.

The *Nationale Raad* case was referred by Belgium to the ECJ for a preliminary ruling regarding a regulation. This included the prohibition of the commercial use of specimens and the restrictions it imposed on the free movement of goods.<sup>603</sup> The Court ruled that:

Where it proves impossible to determine with certainty the existence or extent of the risk envisaged because of the insufficiency, inconclusiveness or imprecision of the results of the studies conducted, but the likelihood of real harm to human or animal health or to the environment persists should the risk materialize, the precautionary principle justifies the adoption of restrictive measures.<sup>604</sup>

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<sup>598</sup> Case C-473/98, *Toolex*, [2000] ECR I-5681.

<sup>599</sup> Swedish government imposed a ban on a chemical substance which was in the list of EU level 3 carcinogen in the ‘Directive 67/548/EEC of 27 June 1967 on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances, [1967] OJ 196/1.’

<sup>600</sup> *Toolex*, supra 598. para. 45.

<sup>601</sup> *Id.*

<sup>602</sup> Opinion of Advocate-General Mischo, delivered on 21 March 2000 in *Toolex*, supra 598 para. 70.

<sup>603</sup> Council Regulation (EC) No 338/97 of 9 December 1996.

<sup>604</sup> Case C-219/07 *Nationale Raad van Dierenkwekers en Liefhebbers VZW* [2008] ECR I-4475, para. 38.

Therefore, the precautionary principle justified the restrictive measure, provided that ‘such prohibitions or restrictions do not constitute a means of arbitrary discrimination or a disguised restriction on trade between Member States’.<sup>605</sup>

Case law has also clarified the **thresholds** for the application of the principle, which were not specified in the EC Treaty or the secondary laws. The *Pfizer* case is probably the most significant instance in which the ECJ set a clear threshold for application of the principle. This threshold has since been followed in subsequent decisions. The producer of an antibiotic challenged the disputed regulation on grounds that the precautionary principle had not been properly employed. The use of their product had been banned in animal feedstuffs by the EC council in 1998. To assess whether the measure in question was properly based on the principle, the ECJ ruled that:

A preventive measure may be taken only if the risk, although the reality and extent thereof have not been ‘fully’ demonstrated by conclusive scientific evidence, appears nevertheless to *be adequately backed up by the scientific data* available at the time when the measure was taken.<sup>606</sup>

The Court went further by setting a minimum threshold, below which the principle could not be invoked, and clarified that:

The precautionary principle can therefore apply only in situations in which there is a risk, notably to human health, which, although it is not founded on mere hypotheses that have not been scientifically confirmed, has not yet been fully demonstrated.<sup>607</sup>

It can be seen from the above statements that the principle cannot be based on a ‘purely hypothetical approach to the risk’ or on ‘mere conjecture which has not been scientifically verified’. It should instead be ‘adequately backed up by the scientific data available’ at the time of making the decision, even if, ‘the reality and extent thereof have not been *fully* demonstrated by conclusive scientific evidence’.<sup>608</sup>

The court in the *Waddenzee* case ruled in its precautionary reasoning that the requirement to conduct an EIA is still essential even if there is a ‘mere probability’ of harm and not ‘definitely significant effects’.<sup>609</sup> This defined the trigger point for protection under article 6.3 of the ‘habitat directive’, which lowered the threshold and allowed the authorities to consider uncertain risks in the criteria for risk assessment.

In the *Nationale Raad* case, the court held that the risk assessment should be based on the ‘most reliable scientific data available and the most recent results of international

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<sup>605</sup> Id. para. 28.

<sup>606</sup> *Pfizer*, supra 583, para.144

<sup>607</sup> Id. para.146

<sup>608</sup> *Id.*

<sup>609</sup> Case C-127/02, *Waddenzee*, [2005] ECR I-6515, para.41.

research'. If certainty was impossible, due to the 'insufficiency, inconclusiveness or imprecision' of science and there still was a 'likelihood of real harm', then it ruled that the measure was justified by the precautionary principle.<sup>610</sup>

In the *Toolex* case, the court, in determining the legitimacy of the measure adopted by the member state, took into account 'the latest medical research on the subject' and acknowledged the member state's concern regarding the danger of the substance to human health:

Taking account of the latest medical research on the subject, and also the difficulty of establishing the threshold above which exposure to trichloroethylene poses a serious health risk to humans, given the present state of the research, there is no evidence in this case to justify a conclusion by the Court that national legislation such as that at issue in the case in the main proceedings goes beyond what is necessary to achieve the objective in view.<sup>611</sup>

As per the Council's duty to take **scientific data** into account, the court in the *Mondiet* case acknowledged the wide discretionary power of the council in the application of the common agricultural policy. It stated that the judicial review must:

Be limited to examining whether the measure in question is vitiated by a manifest error or misuse of powers, or whether the authority in question has manifestly exceeded the limits of its discretion.<sup>612</sup>

The court put a threshold for the discretion granted to the decision makers in the case *Commission v. Netherlands*, however. It ruled:

That discretion relating to the protection of public health is particularly wide where it is shown that uncertainties continue to exist in the current state of scientific research as to certain substances.<sup>613</sup>

#### 4.2.1 Tests

This section looks into some remarkable and different tests that courts have mostly applied when operationalizing the precautionary principle. Namely, these are 'proportionality', risk assessment' and the principle's role as 'an interpretative tool'.

##### *Proportionality*

As explained in chapter three, along with the elements of environmental harm and uncertainty, the precautionary action is also important. A precautionary measure to protect the environment from potential damage is evidently required to be effective and

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<sup>610</sup> Nationale Raad supra 613, paras. 37 and 38.

<sup>611</sup> Toolex, supra 607. para. 42-45.

<sup>612</sup> Case C-405/92, *Armand Mondiet*, [1993] ECR I-6176, para. 32. See also Case C-331/88 *Fedesa* [1990] ECR I-4023, paragraph 8.

<sup>613</sup> Case C- 368/10 *Commission v The Kingdom of the Netherlands* [2012] ECR I-284, para. 43.

proportional. The ECJ has emphasised the importance of proportionality in the implementation of the principle on several different occasions.

In *Commission v Netherlands*, which concerned the prohibition imposed by the Netherlands on the marketing of fortified foodstuffs, the court recognized the right for the member states, in the absence of harmonization law, to choose their level of protection. However, they stated that this discretion should comply with the proportionality principle, and that the measures must be:

Confined to what is actually necessary to ensure the safeguarding of public health; they must be proportional to the objective thus pursued, which could not have been attained by measures which are less restrictive of intra-Community trade.<sup>614</sup>

Accordingly, a strict interpretation is required, since protecting public health and the environment under Article 36 of the treaty is an exception to the general rule of the free movement of goods. National authorities have to demonstrate, in light of international scientific evidence, the necessity of adopting a restrictive measure.<sup>615</sup> In addition, these measures must be based on a ‘detailed assessment of risk’ if they invoke article 36.<sup>616</sup> To review the risk assessment, a national authority has to ‘appraise the degree of probability of harmful effects’.<sup>617</sup> The court must then consider the uncertainty of the risk and include the possibility of the ‘future effects’ and ‘cumulative effects’ in the risk assessment. It can then promote a precautionary risk assessment.<sup>618</sup> Therefore, if the national authority can demonstrate that a measure is necessary, based on the possibility of the future effects, then the measure is considered to be proportional and legitimate.

The court In the *Nationale Raad* case acknowledged that proportionality, under Article 30 EC, requires the restrictive measures to be confined to ‘what is necessary to achieve the objectives of protection being legitimately pursued’.<sup>619</sup> However, it held that when applying the principle of proportionality, it is also necessary to ‘take into account the specific nature of the species concerned’. Therefore, it concluded that if one member state imposed a less stringent measure than another member state, this does not imply that the latter’s measure is disproportionate.<sup>620</sup> Following this statement, it recognized the right for member states to choose their own level of protection, and held that:

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<sup>614</sup> *Id.* para.46.

<sup>615</sup> *Id.* para. 47.

<sup>616</sup> *Id.* para. 36.

<sup>617</sup> *Id.* para. 49.

<sup>618</sup> *Id.* paras. 50,51.

<sup>619</sup> *Nationale Raad*, supra 613, para.30.

<sup>620</sup> *Id.* para. 30.

Member State has chosen a system of protection different from that adopted by another Member State cannot affect the appraisal as to the need for and proportionality of the provisions adopted.<sup>621</sup>

The court further stated that it could not decide on the proportionality of the measure, since deciding on whether a measure is least restrictive, in this case ‘requires a specific analysis on the basis, *inter alia*, of the various applicable provisions, previous practice and scientific studies’. This was a matter for the national courts to decide.<sup>622</sup> In this fashion, the court narrowly interpreted the principle of proportionality, and the necessity test, in favour of the environmental concerns.

In a similar manner, the Court in the *Waddenzee* case interpreted the restrictive measure of the member state in light of the principle, and held that ‘a less stringent authorization criterion than that in question could not as effectively ensure the fulfillment of the objective of site protection intended under that provision’.<sup>623</sup>

This line of reasoning, in which the proportionality of the measure was not simply assessed against its economic impact, also has a bearing on environment-related investment disputes. In general, the protection of the environment is an exception to free trade under the EU law. Accordingly, a court has to decide whether a measure intended to protect the environment meets the criteria to be excepted from trade restrictive measures. Nevertheless, when evaluating a measure’s proportionality courts should not only ask whether a measure is proportional to the impact it has caused on trade, but should also take into account the nature of environmental harm that is being prevented. One could draw an analogy between the task of ECJ and investment tribunals, in the sense that they both have to assess whether a measure to protect the environment is proportional. Therefore, when deciding whether a host state’s measure to prevent a potential harm is proportional, tribunals could also take into account the nature of the specific environmental danger, instead of focusing only on the ‘charge and weight imposed on the foreign investor’.<sup>624</sup>

### *Risk assessment*

In EU case law, risk assessment is defined as a tool to assess the degree of probability of harm.<sup>625</sup> Conducting a risk assessment prior to carrying out health and environmental

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<sup>621</sup> *Id.* para. 31.

<sup>622</sup> *Id.* para. 41.

<sup>623</sup> *Waddenzee*, supra 580. para. 58.

<sup>624</sup> *Tecmed award*, supra 70, para 122.

<sup>625</sup> *Pfizer*, supra 576. para.148.



measures in the EU is crucial. However, despite the WTO, it is not regarded as an exclusive basis of precautionary action. By way of explanation, in general, measures have to be based on risk assessment, however, if the decision maker justifies that the measure was taken according to the public interest or other social or political concerns, that is in the realm of risk management, the result of the risk assessment could be disregarded.

Regarding the risk assessment, the court from the *Pfizer* case held that in the face of scientific uncertainty, ‘risk assessment cannot be required to provide the Community institutions with conclusive scientific evidence of the reality of the risk and the seriousness of the potential adverse effects were that risk to become a reality’.<sup>626</sup> The court acknowledged that when the precautionary principle is applied, it may prove impossible to carry out a full risk assessment due to the ‘inadequate nature of the available scientific data’, since it requires ‘long and detailed scientific research’.<sup>627</sup> A decision maker or public authority should not wait for a full risk assessment to take preventive measures ‘at very short notice if necessary, when such measures appear essential given the level of risk to human health which the authority has deemed unacceptable for society’.<sup>628</sup> However, the precautionary measure cannot also be based on a purely hypothetical approach,<sup>629</sup> and it should be taken only:

If the risk, although the reality and extent thereof have not been ‘fully’ demonstrated by conclusive scientific evidence, appears nevertheless to be *adequately backed up by the scientific data available* at the time when the measure was taken.<sup>630</sup>

Accordingly, the Court, introduced a step-by-step basis towards a risk assessment with a precautionary approach based on the guidelines provided under the Communication. It took this approach to answer the question on how the decision maker should define its accepted level of risk. The court also stated that to determine the acceptable level of risk, the level of protection appropriate for the society should first be defined. This could be a possibility threshold for the adverse effects that is no longer acceptable by the society and beyond that point that the decision maker. Here, the Community has to take a preventive measure in the face of scientific uncertainty. Nevertheless, the seriousness of the case has to be determined on a case-by-case basis, taking into account the ‘severity’, ‘persistence’, ‘reversibility’ and the ‘possibility’ of the delayed effects.<sup>631</sup> To

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<sup>626</sup> *Id.* para.142.

<sup>627</sup> *Id.* para.160.

<sup>628</sup> *Id.* para.160.

<sup>629</sup> *Id.* para.143.

<sup>630</sup> *Id.* para.144.

<sup>631</sup> *Id.* para.153.

decide on this, the Court asserted that the decision maker should take into account the political objectives that it is pursuing.<sup>632</sup>

In the *Commission v. Netherlands* case, the principle was invoked by the member state when justifying the rejection of the manufacturers' application, which was to add nutrient to foodstuffs. When reviewing the Netherlands' decision on the basis of the precautionary principle, the court affirmed that according to the case law, decisions have to be made according to an in-depth risk assessment.<sup>633</sup> However, the court allowed the authorities to enjoy discretion as regards the public's need for the nutrient in foodstuffs, which was 'not part of the assessment of risk for public health'.<sup>634</sup> When affirming that the risk assessment was necessary, the court demonstrated that this could not be the only grounds for the decision. They determined that the decision maker's other social/non-science-based concerns should also be taken into account.<sup>635</sup> In the same vein, AG *Maduro* affirmed that member states should have discretion regarding decisions that are taken based on scientific assessment, and that recourse to the principle should not only be based on the risk assessment. The policy dimension of defining the acceptable level of risk should also be taken into account. A review of case law has acknowledged that community decisions may be different from the finding of the scientific assessment.<sup>636</sup>

In the *National Raad* case, the court ruled that the authority, which adopted the restrictive measure to protect the species, was required to conduct a risk assessment based on the available scientific evidence.<sup>637</sup> The court also ruled that if, because of the 'insufficiency, inconclusiveness or imprecision', it was impossible to be certain about the risks, but the 'likelihood of real harm persists if the risk materialized', the principle still justified adopting the restrictive measure.<sup>638</sup> Therefore, although the risk assessment is a requirement under EU law and jurisprudence, states have leeway in choosing how much risk society is willing to accept.

The implication of this analysis was to demonstrate that in the context of EU case law, the precautionary principle is placed beyond the risk assessment requirement. The latter cannot encompass all the factors that are required to prevent and manage a potential environmental harm.

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<sup>632</sup> *Id.* para.151.

<sup>633</sup> *Commission v Netherlands*, supra 622. para.66.

<sup>634</sup> *Id.* para.68.

<sup>635</sup> *Id.* para.69.

<sup>636</sup> Opinion of Advocate General Poiares Maduro delivered on 14 September 2004 on *Commission v Netherlands*, supra 622. Para.32.

<sup>637</sup> *Nationale Raad*, supra 613, para.37.

<sup>638</sup> *Id.* para.38.

*Precautionary principle as an interpretative tool*

Courts have implemented the principle to evaluate the legitimacy of measures taken in the face of scientific uncertainty when protecting the environment and human health. The principle has been used in the capacity that it was given under the Article 130r Treaty, namely, to interpret obligations.

The *Mondiet* case represents an instance in which the court made use of the principle, implicitly, to interpret the provisions of the legislation.<sup>639</sup> The case involved a challenge to the legality of Council Regulation on the conservation of fishery resources, which was adopted in the face of uncertainty. The regulation imposed a limitation on the use of driftnets larger than 2.5 km, to protect cetaceans.<sup>640</sup> *Mondiet*, the ship owner, challenged the ban by claiming that no scientific data justified this measure, and that it did not conform to the only information available stipulated in the article two of the Regulation. This article stipulated that ‘the conservation measure should be in view of the information that was available’.<sup>641</sup> The Court held that the provision didn’t require the institutions to adopt the measure ‘consistent with the scientific advice’, and stated that if they were inconclusive it should not prevent the institution from taking necessary measures to achieve the ‘objectives of the common fisheries policy’.<sup>642</sup> Therefore, the institutions should not be forced to follow a particular scientific opinion.<sup>643</sup> In this case, the concept of the precautionary principle played an important role in justifying the secondary legislation in the face of uncertainty, although it was not explicitly mentioned. In *Greenpeace*, a case regarding marketing approval for genetically modified maize, was brought before the ECJ for preliminary ruling. This case is another example of implementing the principle to interpret the secondary rules. The question was whether, among other things, the member state was obliged to give consent to a company allowing the product to be placed in the market. The precautionary principle was reflected in the directive for the requirement of a risk assessment, notifying other member states of new information regarding the risks and the rights of the member state. Specifically, this case concerned the state’s right to restrict or prohibit the use of the product in its territory when it had justifiable reasons to consider that it constituted a risk to human health or the environment. According to the court, these requirements

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<sup>639</sup> *Armand Mondiet*, supra 621.

<sup>640</sup> EC Regulation 345/92 of 27 January 1992 amending for the eleventh time Regulation (EEC) No 3094/86 laying down certain technical measures for the conservation of fishery resources, [1992] OJ L42/15 (no longer in force).

<sup>641</sup> *Armand Mondiet*, supra 621, para. 28.

<sup>642</sup> *Id.* Paras.31-36.

<sup>643</sup> *Id.*

by the law necessarily implied that the ‘member state could not be obliged to grant an authorization if it had received new information in the meantime which led it to consider that the product may constitute a risk to human health or the environment’.<sup>644</sup>

De Sadeleer suggested that ‘the court’s decision demonstrated that the Directive should be interpreted in such a way that would give full weight to the environmental protection. In this sense the principle appears capable of modifying the meaning’ of a text in favor of the environment.<sup>645</sup> In this context, the precautionary principle was used as an interpretative tool, and by this reasoning, the economic restrictions imposed by the measures were justified by its notion. The court ruled that the precautionary principle was already reflected in the Directive by the requirement to give notice when facing a risk. It was also reflected in the right to restrict or prohibit the trade of a hazardous product.<sup>646</sup> Therefore, the national authority was allowed to take the provisional measure in question.

The court in the *Pfizer* case also used the principle to interpret the duty contained in Article 129(1) of the EC Treaty to ensure a high level of human health protection. It held that the community is not required to ‘wait for the adverse effects... to materialize’, and is:

Entitled to take a preventive measure...even though, owing to existing scientific uncertainty, the reality and the seriousness of the risks to human health associated with that use were not yet fully apparent.<sup>647</sup>

Moreover, the court considered the complexity of the issue and the uncertainties surrounding it. It stated that public authorities should ensure that decisions are taken in the light of the best scientific information available, and should also use the most recent results of international research.<sup>648</sup>

In the *Waddenzee* case, the Netherlands’ State Council sought interpretation of the Habitats Directive from the Court.<sup>649</sup> According to this Directive, any project that is ‘likely to have a significant effect’ should be subject to an EIA. This is done to assess and ensure that the project’s safety is in line with the site’s conservation objectives. The court ruled that authorities were to authorize the plan only if the applicant could prove

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<sup>644</sup> Case C-6/99, *Greenpeace France et Ministère des Affaires Etrangères*, [2000] ECR I-1676. para. 45.

<sup>645</sup> de Sadeleer, ‘The Precautionary Principle as a Device for Greater Environmental Protection: Lessons from EC Courts’, supra 581, p. 8.

<sup>646</sup> *Greenpeace*, supra 644. para. 44.

<sup>647</sup> *Pfizer*, supra 576, paras. 140,141.

<sup>648</sup> *Id.* para.158.

<sup>649</sup> Two non-governmental organizations challenged the authorization that was granted by the national authority based on the directive. The national authority took some provisional measures but was uncertain whether this action complies with the requirements of the ‘*Birds Directive*’ and the ‘*Habitats Directive*’. Therefore, it has submitted the some questions to the Court for a preliminary ruling.

that the project ‘would not adversely affect the integrity of the site concerned’. The national authority referred some questions to ECJ regarding, *inter alia*, the requirements to recognize the likelihood of significant adverse effects, and also when it should be considered significant. When responding, the court used the principle as an interpretative tool to look at the obligations under the Directive, here the EIA, by holding that:

In the light, in particular, of the precautionary principle, which is one of the foundations of the high level of protection pursued by Community policy on the environment, in accordance with the first subparagraph of Art.174 (2) EC, and by reference to which the Habitats Directive must be interpreted, such a risk exists if it cannot be excluded on the basis of objective information that the plan or project will have significant effects on the site concerned.<sup>650</sup>

According to the court, such an interpretation contributed to achieving the main aim of the Directive, which is ‘ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora.’<sup>651</sup> In this way, the court contended that the authorization system ‘integrated’ the precautionary principle and made it possible to effectively prevent adverse effects to the protected sites.<sup>652</sup> The court also concluded that a less stringent measure would not have effectively ensured the fulfillment of the objectives of the directive.<sup>653</sup> Accordingly, by adopting a precautionary thinking, the court lowered the threshold for conducting a risk assessment. It stated that article 6(3) does not presume that the activity has adverse effect on the environment but the mere probability of having such effect will trigger the application of the article.<sup>654</sup>

In *Denmark and European Parliament v. Commission*,<sup>655</sup> the Commission granted a general exemption of the use of a hazardous chemical substance in electrical equipment. The exemption was challenged by the European parliament and Denmark before the ECJ, on the grounds that granting the exemption was not perusing the main objective of the directive.<sup>656</sup> In addition, the granting of the exception did not meet its conditions, which showed that the prohibition of products should be ‘only in accordance with the carefully defined condition’.<sup>657</sup> The court stated that:

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<sup>650</sup> *Waddenzee*, supra 580, para. 44.

<sup>651</sup> *Id.* paras. 37,44.

<sup>652</sup> *Id.* Para. 58; National Farmers' Union, supra **Error! Bookmark not defined..** Para. 63.

<sup>653</sup> *Waddenzee*, supra 580. para. 58.

<sup>654</sup> *Id.* para. 41.

<sup>655</sup> Cases C-14/06 and C-295/06, *European Parliament v. Commission*, [2007] ECR I-7441.

<sup>656</sup> *Id.* para 170.

<sup>657</sup> Directive 2002/95/EC of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment, [2003] OJ L37/19

Such an objective, in compliance with Article 152 EC, according to which a high level of human health protection is to be ensured in the definition and implementation of all Community policies and activities, and in compliance with Article 174(2) EC, according to which Community policy on the environment is to aim at a high level of protection and is based on the principles of precaution and preventive action justifies the strict interpretation of the conditions for exemption.<sup>658</sup>

Therefore, the precautionary principle was not applied by the Court as grounds for the annulment, but was instead used as an interpretative tool to support the strict interpretation.

To sum up, although the definition of the principle is rather general, and is only applicable in certain areas, European case law has clarified a great deal of vagueness in this regard. EU case law has extended the application of the precautionary principle from environmental field to other fields of the decision making, in particular, health and food safety. It has also designed a general framework for the implementation of the principle in the law, by clarifying the definition of the principle.<sup>659</sup> EU courts have attempted in several instances to define the precautionary principle, which has shaped its general meaning and content. These attempts have frequently been cited by subsequent decisions. The case law definition reads as follows:

Where there is uncertainty as to the existence or extent of risks to human health, protective measures may be taken without having to wait until the reality and seriousness of those risks become fully apparent.<sup>660</sup>

In addition to contributing to the applicable framework of the precautionary principle, EU case law demonstrate a model for employing the principle as an interpretative tool to ensure a high level of environmental protection.

### 4.3 ICJ case law

The initial concern for protecting the environment in the International Court of Justice (ICJ) has been narrowly focused on the consequences, and on preventing the transboundary harm. This concern is as opposed to the idea of protecting the environment as an international common good to be preserved by all states.<sup>661</sup> The

<sup>658</sup> *European Parliament v. Commission*, supra 664, paras. 74-75.

<sup>659</sup> See Nicolas de Sadeleer, *Implementing the Precautionary Principle Approaches from the Nordic Countries, EU and USA* (London ; Sterling, VA : Earthscan, 2007); Nicolas de Sadeleer, 'The Precautionary Principle in EU Law', *AV&S*, 2010.

<sup>660</sup> See Case C-157/96, *National Farmers' Union and Others*, [1998] ECR I-2211, para. 63; Case C-180/96, *United Kingdom v. Commission*, [1998] ECR I-2265, para. 99; Case C-236/01, *Monsanto Agricoltura Italia*, [2003] ECR I-8105, para. 111. *Pfizer*, supra 583, para. 139; Case T-74/00 R. *Artegodan GmbH v. Commission of the European Communities* [2000] ECR II-2583, para. 185.

<sup>661</sup> Jorge E. Vinuales, 'The Contribution of the International Court of Justice to the Development of International Environmental Law: A Contemporary Assessment', *Fordham International Law Journal*, 32.1 (2008), p. 236.

origin of this legal conception can mainly be found in the famous *Trail Smelter* case.<sup>662</sup> Nevertheless, this narrow conception of environmental protection needs to be changed, due to the fact that the environment has an intrinsic value that must be protected, irrespective of whether or not a neighbor state is injured.<sup>663</sup> The following cases brought before the ICJ demonstrate instances in which the contending parties invoked the precautionary principle. The crucial fact is that although the Court has not expressly applied the principle, it has never refuted its existence.

#### *Nuclear Test cases*

The *Nuclear Test* case was brought by New Zealand and Australia in 1973 against France for its attempt to conduct atmospheric nuclear testing. Australia and New Zealand requested for a provisional measure and a permanent ban to stop France from conducting nuclear tests, which were causing radioactive fallout on Australian and New Zealand territory.<sup>664</sup> Both claimants insisted that under contemporary international law, states planning to conduct activities with the potential to harm the environment have to take the burden of proving the safety of those activities. This demonstrates a precautionary approach. The court noted the French statement that the radioactive matter and any fallout had never posed any danger to the population's health, however it did not give its opinion on the merits, and rejected the request for a provisional measure since the nuclear testing had allegedly come to an end.<sup>665</sup> The claimants raised the question of the precautionary principle, but it was only briefly mentioned in a dissenting opinion. In his dissenting opinion on the *Nuclear test II*, Judge Weeramantry argued that the principle was already relevant to New Zealand in its original application, and that the court should have considered it.<sup>666</sup>

The court included a provision in its judgment in an innovative manner, according to which 'if the basis of this judgment were to be affected, the applicant could request an examination of the situation'.<sup>667</sup> Judge Weeramantry's later dissenting opinion on the *Nuclear test II*, argued the judgment to be a 'precautionary provision', which the court included in the judgment when France unilaterally declared that it would discontinue the

<sup>662</sup> Trail smelter case (United States, Canada), 1938 and 1941. ICJ.

<sup>663</sup> Jorge E. Vinuales, *supra* 661. Para. 238.

<sup>664</sup> Nuclear Tests (*Australia. v. France*), 1974 ICJ 253 (Dec. 20); (*New Zealand. v. France*), 1974 ICJ 457 (Dec. 20). (Hereinafter Nuclear Tests I).

<sup>665</sup> Nuclear Tests I, para 18.

<sup>666</sup> Request for an Examination of the Situation in Accordance with Paragraph 63 of the Court's Judgment of 20 December 1974 in the Nuclear Tests Case (*New Zealand. v. France*), 1995 ICJ (Sept. 22) (hereinafter Nuclear Tests II). Weeramantry dissenting opinion.

<sup>667</sup> Nuclear Test I, *supra* 673, para. 477.

atmospheric testing of nuclear weapons.<sup>668</sup> He noted that the court enabled New Zealand to come before the court again, by making a ‘procedural innovation’, although it was convinced that New Zealand had achieved its objectives and its rights had been protected.<sup>669</sup> In his words, the court:

Considered the protection of New Zealand's rights to be so fundamental that it reinforced New Zealand's protections by inserting the precautionary provision that if the basis of the Judgment should be affected, New Zealand may approach the Court again<sup>670</sup>... It was a procedural innovation by the court.<sup>671</sup>

After twenty years, in 1995, France decided to conduct underground nuclear testing. The parties attempted to reopen the case based on the section of the previous judgment in *Nuclear Test I*.<sup>672</sup> New Zealand argued that France was under an obligation to conduct an EIA prior to the nuclear testing, and also had to ‘provide evidence’ according to the ‘precautionary principle’, as a widely accepted principle in contemporary international law, that such an activity would not introduce radioactive materials to the marine environment.<sup>673</sup>

The majority decided that the previous judgment regarded atmospheric tests, whereas the current case regarded an underground nuclear test. Therefore, without entering to the merit phase, the court regarded the cases as a new claim, and therefore dismissed New Zealand’s request. Regardless of this fact, the dissenting opinions that followed the order provided some valuable assertions on the directions that the court might have taken, had it been able to hear the case. Judge Korma questioned the court’s decision, and affirmed that based on the weight of the evidence and the seriousness of the matter concerning the ‘cumulative effect of underground testing’,<sup>674</sup> New Zealand had established ‘a prima facie case’ for the Court to consider and grant a provisional order.<sup>675</sup> In addition, although not explicitly referring to the principle, he asserted that ‘under contemporary international law, there is probably a duty not to cause gross or serious damage which can reasonably be avoided’.<sup>676</sup> Judge Korma added that ‘the evidence, though not conclusive, is sufficient to show that a risk of radioactive contamination of the marine environment may be brought about as a result of the resumed tests’.<sup>677</sup>

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<sup>668</sup> Weeramantry dissenting opinion. *supra* 675, para.320

<sup>669</sup> *Id.* para.321.

<sup>670</sup> *Id.* Para. 333

<sup>671</sup> *Id.* Para.338.

<sup>672</sup> *Nuclear Tests II*. *Supra*, 675.

<sup>673</sup> *Id.* para 5.

<sup>674</sup> *Nuclear Tests II*. *Supra*, 675. Judge Korma Dissenting opinion, para. 368.

<sup>675</sup> *Id.* p. 374.

<sup>676</sup> *Id.* p. 378.

<sup>677</sup> *Id.* p. 379.



Judge Palmer referred *ad hoc* to the risks involved in executing nuclear testing, and emphasized that the inherent nature of the risk in the activity itself ‘would suggest *caution* to be appropriate’.<sup>678</sup> He also took into account the relevant principles of international law with respect to this case. He argued that ‘international environmental law has developed rapidly and is tending to develop in a way that provides comprehensive protection for the natural environment’.<sup>679</sup> Conducting an EIA where the activities pose a significant risk to the environment and the precautionary principle, which has developed rapidly, may now be the principle of customary international law relating to the environment.<sup>680</sup>

Finally, Judge Weeramantry, who in several instances attempted to develop the concept and applicability of the precautionary principle, made note of the importance of the principle. He insisted that the magnitude of destructive power that had been awesomely demonstrated by New Zealand required the court to be ‘ultra-cautious’.<sup>681</sup> He also commented on a constituent element of the principle, the shift in the burden of proof, and argued that proof or disproof of the disputed matter would be very difficult for New Zealand. The data necessary to might be largely in the hands of France who is threatening the damage by its activities.<sup>682</sup> He asserted that the precautionary principle is the only way for the law to overcome this ‘evidentiary difficulty’.<sup>683</sup> In this situation:

The principle then springs into operation to give the Court the basic rationale for considering New Zealand's request and not postponing the application of such means as are available to the Court to prevent, on a provisional basis, the threatened environmental degradation, until such time as the full scientific evidence becomes available in refutation of the New Zealand contention.<sup>684</sup>

On the status of the principle, Judge Weeramantry emphasized that the principle is gaining increasing support as ‘part of the international law of the environment’, and ‘inevitably calls for consideration’ in this case.<sup>685</sup> He also argued that the EIA is ancillary to the precautionary principle and, like the latter, is gaining strength and international acceptance. It has reached such a level of general recognition that the court should take it into account.<sup>686</sup> In cases when there are serious environmental issues at stake, as in the current case, the Court is ‘entitled to take into account the Environmental Impact

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<sup>678</sup> Nuclear Tests II. Supra 675, Judge Palmer Dissenting opinion 69.

<sup>679</sup> *Id.* para. 91.a

<sup>680</sup> *Id.* para 91.c and d.

<sup>681</sup> Nuclear Tests II. Supra 675, Weeramantry, sup.675.

<sup>682</sup> *Id.* p.342.

<sup>683</sup> *Id.* p.342

<sup>684</sup> *Id.* p.342

<sup>685</sup> *Id.* p. 42

<sup>686</sup> *Id.* p.344.

Assessment principle'.<sup>687</sup> All of these fears may be well proved to be unmerited, but only after conducting such a study.<sup>688</sup>

The points made by such an appreciated member of the court are claimed to have the potential to be very influential in future disputes and discussions over the law.<sup>689</sup>

Generically, the opinions of the judges on the applicability of the principle inferred that it might have great potential to play an important role in the future cases.

#### Nuclear weapons

The Advisory Opinion of the ICJ on the *Legality of the Threat or Use of Nuclear Weapons* case regarded the question asked by the United Nations on whether states were permitted to use their nuclear weapons.<sup>690</sup> To be more precise, the United Nations asked: 'Is the threat or use of nuclear weapons in any circumstance permitted under international law?'.<sup>691</sup>

In giving its opinion, the Court made very important statements regarding the environment. It acknowledged that since the environment was under serious threat, states were under 'general obligation' to ensure that their activities within their territory would respect the environment of other states. The ICJ recognized that this obligation 'is now part of the corpus of international law relating to the environment'.<sup>691</sup> The Court went further to emphasize the prominence and urgency of protecting the environment, and declared that:

States must take environmental considerations into account when assessing what is necessary and proportionate in the pursuit of legitimate military objectives. Respect for the environment is one of the elements that go to assessing whether an action is in conformity with the principles of necessity and proportionality.<sup>692</sup>

Irrespective of disclosing the potential dangers and admitting the existence of the environmental threat, the court finally held that states were forbidden from using nuclear weapons when there was no threat to their existence. Whether they could use these weapons when there is a threat to their existence, i.e. in wartime, remains unclear.<sup>693</sup>

Judge Weeramantry's criticism of this case pointed out some very important issues, which while reflecting his own ideas and not those of the court, could be viewed as

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<sup>687</sup> *Id.* p.345.

<sup>688</sup> *Id.* p.345.

<sup>689</sup> McIntyre and Mosedale, p. 84.

<sup>690</sup> *See* Legality of the Threat or Use of Nuclear Weapons (United Nations), 1996 ICJ. (July 8), (Hereinafter Nuclear weapon). paras. 226,227-229, 241.

<sup>691</sup> *Id.* para 247.

<sup>692</sup> *Id.* Para. 242.

<sup>693</sup> *Id.* para. 266

possible discourse in future decisions. In his opinion, the use of nuclear weapons should be illegal in any case regardless of being at war or not. He believed that their use violates the fundamental principles of international law. He then referred to the principles of environmental law, which are now ‘so deeply rooted in the conscience of mankind that they have become particularly essential rules of general international law’.<sup>694</sup> Judge Weeramantry believed that the use of the nuclear weapons would violate the principles of environmental law, including the precautionary principle, the principle that the burden of proof lies upon the author of the environmentally harmful act and the principle that the polluter pays the principle.<sup>695</sup> He emphasized that these principles ‘proceed from *general duties*’, and that their validity did not come from the treaty provision, as they are ‘part of customary international law’. He stated that they were ‘part of the *sine qua non* for human survival’.<sup>696</sup> Accordingly, the Court should recognize and make use of these principles in reaching its conclusions.

#### Gabčíkovo -Nagymaros Project (Hungary/Slovakia)<sup>697</sup>

The Slovakia-Hungary Gabčíkovo–Nagymaros project represents another environmental case that was brought before the ICJ. This case has significant importance for environmental protection, as it has been claimed to be a missed opportunity in the context of the development of environmental principles.<sup>698</sup> The Court in this case made a remarkable statement on the significance of environmental protection.

Two countries agreed to build a dam on Danube River in 1995. After splitting to Czech Republic and Slovakia, Slovakia requested that Hungary fulfill its obligations.<sup>699</sup> Hungary was concerned about the environmental affects of the activity however, and suspended the work. It claimed, among other things, that due to the ‘new requirements’ imposed by international law for the protection of the environment, it could no longer perform the treaty.<sup>700</sup> In particular, Hungary invoked the precautionary principle in its application, stating that:

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<sup>694</sup> Nuclear weapon, Weeramantry Dissenting opinion, *supra* 690. para. 504

<sup>695</sup> *Id.*

<sup>696</sup> *Id.*

<sup>697</sup> Gabčíkovo-Nagymaros Project (Hungary. Slovakia.), 1997 ICJ 7 (Sept. 25). (Hereinafter the Gabčíkovo -Nagymaros).

<sup>698</sup> Arie Trouwborst, *Evolution and Status of the Precautionary Principle in International Law*, 1st ed. (Netherlands: Kluwer Law International, 2002), p. 162.

<sup>699</sup> Gabčíkovo-Nagymaros, *supra* 697, paras.16,17.

<sup>700</sup> *Id.* para.111.

States shall take precautionary measure to anticipate, prevent or minimize damage to their transboundary resources and mitigate adverse effects. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing such measures. Art. 2, paragraph 5(a) of the Convention on the Protection and use of Transboundary Watercourses and Lakes, [...] the IUCN Draft Art.6 and Brundtland Report, Art.10, provide support for the obligation in general international law to apply the precautionary principle to protect a transboundary resource. This duty has extreme importance in this dispute where damage threatening Hungary is irreparable and enormous.<sup>701</sup>

Hungary invoked the principle as the newly developed norms of environmental law. It claimed, among other arguments, that this justified the termination of the project, and claimed that the previous obligation of not causing transboundary harms had ‘evolved into an *erga omnes* obligation of prevention of damage pursuant to the ‘precautionary principle’.<sup>702</sup> Moreover, both parties agreed on the need to take environmental concerns seriously and therefore to take precautionary measures. Slovakia however rejected the claim that environmental norms could be used to breach treaty obligations.<sup>703</sup>

The Court acknowledged the relevance of the newly developed norms of environmental law for the interpretation of the treaty. However, it maintained that since these environmental norms lacked peremptory force, their application should be ruled through articles 15, 19 and 20 of the treaty between the parties. These articles required the parties to ensure that the quality of the water was not impaired. These articles did not have specific obligations of performance, and would only become obligatory if the parties had agreed upon it, which is a joint responsibility of the states.<sup>704</sup> This statement implies that newly developed environmental norms are not applicable under international law, but can be applied through an agreement between the parties to become binding. They are therefore not a general obligation.

In an attempt to further justify its defence, Hungary also argued that the ‘state of ecological necessity’ precluded the performance of the treaty.<sup>705</sup> Slovakia dismissed this claim, and contended that, even if such necessity existed, it could not be used as a reason to abolish the treaty.<sup>706</sup> The Court, however, recognized the significance of the environmental harm, and stated that ecological necessity would be sufficient to nullify the treaty. Since the harm was uncertain, and Hungary could not demonstrate the ‘peril’

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<sup>701</sup> *Id.* para. 31.

<sup>702</sup> *Id.* para.97.

<sup>703</sup> *Id.* para.113.

<sup>704</sup> *Id.* para.112.

<sup>705</sup> *Id.* para.35.

<sup>706</sup> *Id.* para.41.

of environmental harm, the ICJ held that the situation in this case did not meet the criteria for the necessity in question.<sup>707</sup>

When inspecting the ICJ's ruling on the seriousness of the environmental concerns and the state of necessity, one should be aware of the context that informed the decision before claiming that it had implicitly rejected the precautionary principle.<sup>708</sup> The ICJ's reasoning did not define or reject the principle. It instead assessed whether the state of *necessity* has been materialized. The court specified that necessity could only be invoked under certain strictly defined conditions,<sup>709</sup> and stated in the following terms:

Serious though these uncertainties might have been they could not, alone, establish the objective existence of a 'peril' in the sense of a component element of a state of necessity.<sup>710</sup>

Even Judge Weeramantry, who has previously argued in favor of the recognition of the principle, did not see room for its application, in this case due to the status of estoppel for several reasons.<sup>711</sup> Therefore, although some have claimed that the case was not a repudiation of the precautionary principle due to the Court's 'implied' rejection,<sup>712</sup> some other studies have identified various statements in the decision that could be linked to the principle.<sup>713</sup> These statements included, for instance, the importance of environmental protection;<sup>714</sup> the recognition of the ICJ that the environment was vulnerable, which called for assessment of the threatening risks on a 'continuous basis';<sup>715</sup> and also the recognition that the parties should have discussed the actual and

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<sup>707</sup> *Id.* para.42.

<sup>708</sup> Daniel Kazhdan, 'Precautionary Pulp: Pulp Mills and the Evolving Dispute Between International Tribunals Over the Reach of the Precautionary Principle.', *Ecology Law Quarterly*, 38.2 (2011), 527–52 (p. 541).

<sup>709</sup> *Id.* para. 51.

<sup>710</sup> *Id.* para. 54.

<sup>711</sup> Gabčíkovo-Nagymaros, supra 706, Weeramantry separate opinion. Pp115-16. First, the treaty was not suddenly entered into and that during the period of its negotiation and implementation, numerous detailed studies were conducted by many experts and organization and Hungary entered into the treaty despite the clear warnings in 1977. Also that Hungary continued treating the treaty as a valid document for 12 years and in 1981 ordered reassessment of the project based on which, researchers suggested a postponement. Yet, regardless of this warnings, Hungary continued to implement the treaty and also that its parliament approved of the project in 1988. It was only in 1989 that it announced the immediate suspension of the project and thus, according to judge Weeramantry, for all this reasons, the situation could be considered as a legally binding estoppel

<sup>712</sup> Kazhdan. Supra 717. P. 541; Paulo Canelas de Castro, 'The Judgment in the Case Concerning the Gabčíkovo-Nagymaros Project: Positive Signs for the Evolution of International Water Law', *Yearbook of International Environmental Law*, 8 (1997), p. 28. The paper argues that the notion of the precautionary principle 'uncertain harm could be sufficient to prevent an action' was implicitly rejected by the Court.

<sup>713</sup> Trouwborst, *Evolution and Status of the Precautionary Principle in International Law*, p. 163.

<sup>714</sup> Gabčíkovo-Nagymaros, supra 706. para. 53.

<sup>715</sup> *Id.*

‘potential’ risks to the environment.<sup>716</sup> These instances demonstrate the precautionary thinking of the ICJ.

### *Pulp Mills*

The dispute regarding the Pulp Mills on the River Uruguay has important implications for application of the precautionary principle in the future, since for the first time the majority’s opinion addressed the principle.<sup>717</sup> In 2006, Argentina claimed Uruguay’s authorization for the construction of a pulp mill on the Uruguay River had violated the 1975 Statute of the River Uruguay, a treaty between Argentina and Uruguay to create a mechanism to rationally use the river.<sup>718</sup> It claimed that Uruguay had breached its obligation by unilaterally authorizing the construction of the pulp mills on the river. Under the 1975 Statute, the parties were committed to take measures necessary for the rational usage of the river.<sup>719</sup> Argentina requested the Court to permanently shut down the project, claiming that Uruguay had violated its procedural obligations. In the meantime, it also requested provisional measures to close the mill, which were rejected based on the grounds that the activity was safe and would not pose any imminent or irreparable harm. Therefore Uruguay was allowed to continue issuing the permit.

Argentina presented a broad reading and relied heavily on the precautionary principle in two different arguments. Firstly, it argued that the principle required a shift in the burden of proof, and secondly, it claimed that, international law, including environmental principles, should be taken into account by the ICJ to interpret the provisions of the treaty. The two claims will be examined here separately to further clarify the positioning of the Court regarding the principle.

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<sup>716</sup> Id.

<sup>717</sup> Pulp Mills on the River Uruguay (Argentina v. Uruguay), [2010] ICJ Rep. 14. (Hereinafter Pulp Mills). Argentina filed a dispute against Uruguay concerning the breach of obligation under 1975 Statute of River Uruguay between the two country (hereinafter the 1975 Status) and other rules of international law. Argentina was primarily concerned about the ‘effects of the activities on the quality of the waters of the river Uruguay and on the areas affected by the river’. In 2003 Uruguay issued a permit to the Empresa Nacional de Celulosa Española [National Spanish Pulp Company] (ENCE) authorizing a pulp mill construction on the river believing that the construction would not cause any significant harm. Later the presidents of both countries met at Uruguay and president of Uruguay assured that ‘no authorization would be issued before Argentina’s environmental concerns had been addressed’. Therefore they agreed to skip the Administrative Commission of the River Uruguay (hereinafter CARU) procedure. Later, Uruguay submitted the promised EIA but the interpretation were conflicting, as the Argentina believed that based on the assessment, the project is too risky. As a result of the political pressure by Argentina, ENCN, the pulp company, abandoned the project on 2006. Uruguay issued a permit to another company, Botnia in 2005. Kazhdan, *supra* 708, p. 543.) The CARU requested further documentation as it was not satisfied with the companies proof that the project would have no significant environmental harm but Uruguay ignored CARU’s request.

<sup>718</sup> Statute of the River Uruguay, Uruguay-Argentina, Feb. 26, 1975, 1295 UNTS 340.

<sup>719</sup> Pulp Mills, *supra* 726, para. 22 (d): ‘the obligation to take all necessary measures to preserve the aquatic environment and prevent pollution and the obligation to protect biodiversity and fisheries, including the obligation to prepare a full and objective environmental impact study.’

Regarding the first invocation of the principle, Argentina argued that the precautionary approach of the 1975 Statute shifts the burden of proof to Uruguay to establish that the project would *not* cause significant damage to the environment. It argued that it alone should not have had to bear the burden of proving the project's harmlessness.<sup>720</sup>

Referring to its previous decisions, the court pointed out that:

The principle of prevention, as a customary rule, has its origins in the due diligence that is required of a State in its territory... It is every State's obligation not to allow knowingly its territory to be used for acts contrary to the rights of other States... A State is thus obliged to use all the means at its disposal in order to avoid activities which take place in its territory, or in any area under its jurisdiction, causing significant damage to the environment of another State. This Court has established that this obligation is now part of the corpus of international law relating to the environment.<sup>721</sup>

Therefore, the Court established that the obligation, at the procedural stage, was 'to avoid activities... causing significant damage to the environment of another State'. Argentina's argument was that it should not bear the burden of proving the project's safety, and that it was not the state causing significant harm. It argued instead that the precautionary approach required a shift in the party that had to bear the burden of proving the safety of the project. Nevertheless, the court did not allow the principle to reverse the burden of proof, or at least affect the standard of proof, and held that:

While a precautionary approach may be relevant in the interpretation and application of the provisions of the Statute, it does not follow that it operates as a reversal of the burden of proof.<sup>722</sup>

This statement by the Court, although could have been much stronger, represents progress for the principle. For the first time, its applicability was acknowledged outside of the treaty provision, and as a relevant rule for interpretation.<sup>723</sup> However, since the Court applied the general evidentiary rules, which required the applicant to demonstrate and prove the claim of environmental harm, it turned the forward-looking nature of the principle to a 'result oriented obligation'. This made it difficult for Argentina, as the applicant, to prove.<sup>724</sup>

The second occasion in which Argentina insisted on the applicability of the principle regarded the interpretation of the 1975 Statute. This must be 'interpreted in the light of

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<sup>720</sup> Id. para. 160.

<sup>721</sup> Id. para. 101.

<sup>722</sup> Id. para. 164.

<sup>723</sup> Id.

<sup>724</sup> Monika Ambrus, *supra* 542, p. 266.

principles governing the law of international watercourses and principles of international law ensuring protection of the environment'.<sup>725</sup> Argentina argued that:

The 1975 Statute must be interpreted so as to take account of all 'relevant rules' of international law applicable in the relations between the Parties, so that the Statute's interpretation remains current and evolves in accordance with changes in environmental standards. In this connection Argentina refers to the principles of equitable, reasonable and non-injurious use of international watercourses, the principles of sustainable development, prevention, *precaution* and the need to carry out an environmental impact assessment. It contends that these rules and principles are applicable in giving the 1975 Statute a dynamic interpretation, although they neither replace it nor restrict its scope.<sup>726</sup>

Therefore, Argentina believed the precautionary principle to be relevant and applicable in terms of interpreting the treaty obligations. This statement was approved by Uruguay, however they had different interpretation of these principles regarding their extent and scope.<sup>727</sup> The Court availed itself of the relevant rules of applicable international law to interpret the Statute.<sup>728</sup> In interpreting the obligation under the article 41 of the Statute regarding the 'protect and preserve the aquatic environment and, in particular, to prevent its pollution', the Court recalled two cases. The advisory opinion of the first case, *Legality of the Threat or Use of Nuclear Weapons, 1996*, asserted that 'The existence of the *general obligation* of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control is now part of the corpus of international law relating to the environment'.<sup>729</sup> The ICJ also referred to the *Gabčíkovo* case, which stated, 'the Parties together should look afresh at the effects on the environment of the operation of the Gabčíkovo power plant'. Having considered these two decisions, the Court held that it is an obligation of *due diligence* in respect of all activities that take place under the jurisdiction and control of each party.<sup>730</sup>

According to the court, the obligation of due diligence means:

An obligation which entails not only the adoption of appropriate rules and measures, but also a certain level of vigilance in their enforcement and the exercise of administrative control applicable to public and private operators, such as the

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<sup>725</sup> Pulp Mills, *supra* 726, para. 55.

<sup>726</sup> *Id.* para. 55.

<sup>727</sup> *Id.* para. 57.

<sup>728</sup> Article 41 of the 1975 Statute, paragraph (a): 'Without prejudice to the functions assigned to the Commission in this respect, the parties undertake...(a) to protect and preserve the aquatic environment and, in particular, to prevent its pollution, by prescribing appropriate rules and [adopting appropriate] measures in accordance with applicable international agreements and in keeping, where relevant, with the guidelines and recommendations of international technical bodies.'

<sup>729</sup> Pulp Mills, *supra* 726, para. 193.

<sup>730</sup> Pulp Mills, para. 197.



monitoring of activities undertaken by such operators, to safeguard the rights of the other party.<sup>731</sup>

The ICJ finally adjudged that Uruguay had only breached the procedural obligations to notify and to inform.<sup>732</sup> It had not breached its substantive obligations, and so it could continue running the mill. It is however, important to take note of the general obligation of due diligence that the ICJ considered for the states. As will be discussed in the next section, under the International Tribunal of the Law of the Sea (ITLOS) jurisprudence, in a recent advisory opinion, the tribunal referred to this statement by the ICJ that the precautionary principle is an integral part of the obligation of due diligence, and therefore could be considered an obligation under international law.<sup>733</sup>

Judge Vinuesa criticized this part of the decision, and argued that although the obligations under the treaty did not justify a shift on the burden of proof, the application of the precautionary principle, which the court recognized to be relevant in the interpretation of the Statute, should have been used to interpret the Treaty.<sup>734</sup> This means that the obligation of proof is binding to both parties, whereas the court finally held that Uruguay had to co-operate. Judge Vinuesa argues that the statements by the Court were contradicting, as:

It is difficult to follow the Court's reasoning when, on the one hand, it states that Uruguay has breached its procedural obligations (among which is the obligation to produce information) and, on the other hand, it merely exhorts Uruguay, as the Respondent, to co-operate. The Court is thus transforming a previous binding obligation to produce evidence into a mere goodwill gesture to co-operate by providing evidence to the Court.<sup>735</sup>

With respect to the EIA, both parties agreed on the necessity of conducting an EIA. The point of disagreement regarded the scope and the content of the study that Uruguay should have conducted. Uruguay failed to take all of the potential impacts into account, and argued that international law does not impose the conditions and scope of such an assessment; it only imposes 'assessments of the project's potential harmful transboundary effects on people, property and the environment of other States' as required by states' practice and the international law. Uruguay argued that this did not require the study to 'assess remote or purely speculative risks'.<sup>736</sup>

According to the ICJ, the obligation to 'protect and preserve' had to be interpreted in

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<sup>731</sup> Pulp Mills, para. 197.

<sup>732</sup> Reasons for violating in Kazhdan p 542

<sup>733</sup> Advisory Opinion, para 123.

<sup>734</sup> Statute of the River Uruguay, supra, 718.

<sup>735</sup> Pulp Mills, supra 726, Judge Vinuesa dissenting opinion. Para 40.

<sup>736</sup> Id. supra 726, para. 203.

accordance with:

A practice, which in recent years has gained so much acceptance among States that it may now be considered a requirement under general international law to undertake an environmental impact assessment where there is a risk that the proposed industrial activity may have a significant adverse impact in a transboundary context, in particular, on a shared resource. Moreover, due diligence, and the duty of vigilance and prevention which it implies, would not be considered to have been exercised, if a party planning works liable to affect the regime of the river or the quality of its waters did not undertake an environmental impact assessment on the potential effects of such works.<sup>737</sup>

In this important statement, the ICJ observed that the practice of conducting an EIA:

Has gained so much acceptance among States that it may now be considered a requirement under general international law to undertake an environmental impact assessment where there is a risk that the proposed industrial activity may have a significant adverse impact in a transboundary context, in particular, on a shared resource.<sup>738</sup>

In addition, it stated that the lack of specific content and scope under international law should not prevent the applicability of the EIA principle, or domestic legislators. Accordingly, authorities have the duty to define its specific content on a case-by-case basis:

Having regard to the nature and magnitude of the proposed development and its likely adverse impact on the environment as well as to the need to exercise due diligence in conducting such an assessment.<sup>739</sup>

The ICJ made several very important statements on the importance of the threats to the environment, in addition to affirming the status of the EIA. These have been noted by several judges and scholars as being precautionary in nature; here the ICJ did not make use of the principle to consider Argentina's claim. Several judges have since appended the decision and demonstrated their concerns regarding the issue. Judge Simma and Judge Khasawneh both claimed that this case was a golden opportunity that the court missed to demonstrate its ability to adopt a forward looking approach towards the environmental issues, rather than making decisions *ex post facto*.<sup>740</sup> The ICJ could have utilized its power, given by the 1975 Statute, to step in when there was disagreement between the parties regarding the threat of potential harm to the environment. According to these judges, the ICJ could have assisted the parties before the actual harm

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<sup>737</sup> Id. para. 204.

<sup>738</sup> Id. para. 203.

<sup>739</sup> Id. para. 205

<sup>740</sup> Id. Judge Simma and Judge khasawneh dissenting opinion, para.21.

occurred by adopting a more ‘preventive rather than compensatory logic’.<sup>741</sup> The logic of a preventive and forward-looking approach in the field of environment was affirmed by the Court. The ICJ itself stated in the *Gabčíkovo* case in 1997 that:

In the field of environmental protection, vigilance and prevention are required on account of the often irreversible character of damage to the environment and of the limitations inherent in the very mechanism of reparation of this type of damage<sup>742</sup>

The Judges also emphasized that the ICJ should have been aware of the ‘inherent weaknesses and flaws of the traditional retrospective judicial process and its compensatory logic’, and of the urgency to adopt a ‘preventive assessment of risk’ when confronting environmental risks, which often have irreparable character.<sup>743</sup> Judge Simma and Judge Khasawneh also regretted that the ICJ did not consider the multiplicity and complexity of the scientific facts into its reasoning. They stated that:

Given the multiplicity of the factors involved, the long periods of time and accumulation of effects to be taken into account, the intricate questions of causality and interdependence to be considered, all these add up to a complex matrix of factual issues which can only be transformed into a sound evidentiary basis for the Court’s reasoning and decision-making if, and only if, the Court makes use of external scientific and technical expert input, combined with necessary procedural guarantees. This is even more so if there exists a situation where the scientific community itself is divided and the question arises whether, and to what extent, the precautionary principle should enter the fore.<sup>744</sup>

This point was also mentioned in Judge Vinuesa’s criticism, in which he expressed regret that the ICJ did not consider the long-term effects of the already existing pollution that could be attributed to the project. He stated that:

The Court, in my opinion, pre-empted its opportunity to apply the precautionary principle to properly prevent pollution and preserve the aquatic environment of the River Uruguay in conformity with the 1975 Statute and general international law.<sup>745</sup>

Finally, Judge Trindade provided the strongest criticism of the way that the precautionary principle was appended to the award. He extensively elaborated on the principle and its elements, and argued that the principle had taken shape by ‘human conscience’ and the ‘universal juridical conscience’, and was now a general principle of law.<sup>746</sup> With respect to the application of the principle, he argued that the applicability of the principle was accepted by both Argentina and Uruguay, and:

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<sup>741</sup> *Id.* para. 22.

<sup>742</sup> *Gabčíkovo* – Nagymaros, *supra* 706. para. 140

<sup>743</sup> Pulp Mills, *supra* 726, Judge Simma and Judge Khasawneh dissenting opinion, para. 24.

<sup>744</sup> *Id.* para. 23.

<sup>745</sup> Pulp mills, Judge Vinuesa dissent, para 100.

<sup>746</sup> Dissent Judge Trindade para. 68.

Only the ICJ did not acknowledge, nor affirmed, the existence of those principles, nor elaborated on them, thus missing a unique occasion for their consolidation in the present domain of contemporary International Law. The fact that the Court's Judgment silenced on them does not mean that those principles, of prevention and of precaution, do not exist. They do exist and apply, and are, in my view, of the utmost important, as part of the *jus necessarium*. We can hardly speak of International Environmental Law nowadays without those general principles. The Court had a unique occasion, in the circumstances of the case of the *Pulp Mills*, to assert the applicability of the preventive as well as the precautionary principles; it unfortunately preferred not to do so, for reasons which go beyond, and escape, my comprehension.<sup>747</sup>

As can be deducted from the above cases, compared to other tribunals, ICJ has been more reticent towards precautionary principle. In fact, ICJ's approach towards the principle could be divided to two phases; prior to *Pulp Mills* and post *pulp Mills*.

Before *Pulp Mills*, the principle was only referred to in dissents and never in a majority opinion. Even in *Gabcikovo- Nagymaros* where the Court made a crucial statement on the importance of environmental concerns, the principle was not accepted to play a role. Nevertheless, *Pulp Mills* was the first instance where the majority opinion of the ICJ explicitly addressed the precautionary principle. Although the court did not apply the principle to reverse the burden of proof, it confirmed its relevance in the interpretation and application of the provisions of the Status. In a post *Pulp-Mills* decision, ITLOS referred to this acknowledgement by the Court as the affirmation of the precautionary principle.

#### 4.4 ITLOS case law

ITLOS is the central forum in the dispute settlement system established by the United Nations Convention on the Law of the Sea (UNCLOS). It has been described as the 'judicial guardian' of the marine environment.<sup>748</sup> This section aims to give a brief overview of the relevant cases that have been taken before ITLOS, and to examine how its findings on the Precautionary principle reflect the goal of defining the principle. It focuses on the precautionary principle and its implementation into aspects of tribunals' jurisprudence. This section purposely omits other legal issues, and focuses on the state of case law regarding the implementation of the precautionary principle in the law of the sea. This approach was taken to find a common understanding of the principle, and to extract evidence of its acceptance and recognition. Furthermore, this analysis is not

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<sup>747</sup> Dissent Judge Trindade para.113.

<sup>748</sup> Christoph Schwarte, 'Environmental Concerns in the Adjudication of the International Tribunal for the Law of the Sea', *Georgetown International Environmental Law Review*, 16 (2003), 421 (p. 423).

meant to be exhaustive, but rather is focused only on the most pertinent implementations of the Precautionary principle by the ITLOS.

### *Southern Bluefin Tuna*

This case arose from the Convention for the Conservation of Southern Bluefin Tuna (CSBT), a 1993 treaty between Australia, Japan, and New Zealand. The parties agreed on a total allowable catch for the member states, since they were concerned about the species being in the danger of extinction. Despite this agreement, Japan later unilaterally performed a so-called experimental fishing of 1,400 tonnes of Southern Bluefin Tuna (SBT). Australia and New Zealand sued Japan for this reason in ITLOS.<sup>749</sup> The claimants argued that Japan had violated the PRECAUTIONARY PRINCIPLE as a customary international norm, in addition to breaching the provisions of the ITLOS Convention. They argued that it had failed to take the required measures for the conservation and management of SBT.<sup>750</sup> For these reasons, Australia and New Zealand requested ITLOS to order provisional measures in accordance with Article 290.5 of the Convention while awaiting the establishment of the Annex VII tribunal. Under article 290, provisional measures can be prescribed if the tribunal ‘considers appropriate under the circumstances to preserve the respective rights of the parties to the dispute or to prevent serious harm to the marine environment, pending the final decision’.<sup>751</sup> Under Article 290.5, the tribunal must be satisfied *inter alia* that the matter is one of urgency.<sup>752</sup> Japan, the respondent, argued among other things, that the prescription of the provisional measure based on article 290.5 ITLOS Convention was not appropriate. It argued that there was no *urgency*, as its experimental fishing program would not cause irreparable damage to the stock,<sup>753</sup> and that there was no *danger of a serious harm* to the marine environment, so no provisional measure was required.<sup>754</sup>

The tribunal recognized the scientific uncertainty surrounding the measures to conserve the stock of SBT, and also acknowledged that there was no agreement among the parties as to whether the conservation measures taken so far had improved the stock of SBT.<sup>755</sup> Therefore, it held that the situation was one of urgency, both in relation to

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<sup>749</sup> Southern Bluefin Tuna Cases (New Zealand v. Japan), (Australia v. Japan), Provisional Measures, ITLOS, 27 August 1999. (Hereinafter SBT Award).

<sup>750</sup> SBT Award. Para. 3.

<sup>751</sup> UNCLOS. Article 290.1.

<sup>752</sup> *Id.* Article 290.5.

<sup>753</sup> SBT Award, *supra* 758, para. 66.

<sup>754</sup> *Id.* para. 34.

<sup>755</sup> *Id.* para. 79.

preserving the rights of the parties and to prevent serious harm to the marine environment. In relation to the latter, ITLOS considered that ‘the conservation of the living resources of the sea is an element in the protection and preservation of the marine environment’.<sup>756</sup> Therefore, the provisional measure was required to ‘avert further deterioration of the Southern Bluefin Tuna stock’.<sup>757</sup> As a result, ITLOS dismissed Japan’s claim that its catch was experimental and therefore not subject to the limitations of the agreement, and ultimately enjoined the country from increasing its total allowable catch. ITLOS explicitly referred to the ‘scientific uncertainty regarding measures to be taken to conserve the stock of southern Bluefin tuna’,<sup>758</sup> which, combined with the risk of ‘deterioration of the southern Bluefin tuna stock’<sup>759</sup> and the risk of ‘serious harm’ to the Bluefin tuna,<sup>760</sup> led to the tribunal granting provisional measures.<sup>761</sup> The Annex VII tribunal finally declared its lack of jurisdiction on the case without entering into the merit phase.<sup>762</sup> Nevertheless, the implementation of the precautionary approach towards the fisheries, although only implied, was unprecedented.<sup>763</sup>

Judge Traves provided a separate opinion on the tribunal’s award, indicating that urgency was part of the very nature of the provisional measure, which was designed to preserve the right of the parties pending the final decision.<sup>764</sup> Therefore, the requirement of urgency to grant a provisional measure could be justified in the light of the precautionary principle.<sup>765</sup>

Although ITLOS did not explicitly mention the precautionary principle in its decisions, many commentators have observed that the decision relied on it heavily.<sup>766</sup> This proves the increasing importance of the precautionary principle in international law. ITLOS in a subsequent case, the *Seabed Advisory Opinion*, declared that the *Bluefin Tuna Cases*

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<sup>756</sup> *Id.* para. 70.

<sup>757</sup> *Id.* para. 80.

<sup>758</sup> *Id.* para. 79.

<sup>759</sup> *Id.* para. 80.

<sup>760</sup> *Id.* para. 77.

<sup>761</sup> *Id.* para. 89.

<sup>762</sup> The Annex VII tribunal gave its judgment on the question of jurisdiction on August 2000. The tribunal held that it lacked jurisdiction to hear the merits of the case.

<sup>763</sup> Simon Marr, ‘The Southern Bluefin Tuna Cases: The Precautionary Approach and Conservation and Management of Fish Resources’, *European Journal of International Law*, 11.4 (2000), 815.

<sup>764</sup> SBT Award, *supra* 758, Judge Treves, Separate Opinion. Para 2.

<sup>765</sup> *Id.* para 8.

<sup>766</sup> See, e.g., *Id.* separate opinion of Judge Laing: ‘It becomes evident that the Tribunal has adopted the precautionary approach for the purposes of provisional measures in such a case as the present.’; Adriana Fabra, ‘The LOSC and the Implementation of the Precautionary Principle’, *Yearbook of International Environmental Law*, 10.1 (2000), 15–24 (p. 17); David Freestone, ‘Caution or Precaution: “A Rose By Any Other Name...”’, *Yearbook of International Environmental Law*, 10.1 (2000), 25–32 (p. 25).

had implicitly adopted the precautionary principle.<sup>767</sup> Moreover, and most importantly, the precautionary principle is capable of being applied not only directly through the treaty, but also according to general international law, and through the obligation of due diligence.<sup>768</sup> It referred to the tribunal's decision in the SBT case, and stated that:

The link between the obligation of due diligence and the precautionary approach is implicit in the.. [SBT case]... this emerges from the declaration of the tribunal that the parties 'should in the circumstances act with prudence and caution to ensure that conservation measures are taken'... and is confirmed by the further statements that 'there is scientific uncertainty regarding measures to be taken to conserve the stock of [SBT]' and that 'although the Tribunal cannot conclusively assess the scientific evidence presented by the parties, it finds that measures should be taken as a matter of urgency.'<sup>769</sup>

Judge Traves further argued that there was no need for the tribunal to decide on the status of the precautionary principle. He stated that it was not relevant for the tribunal to rule on whether the principle had gained the form customary international norm to make it applicable, or wait for the customary international law to 'dictate' it. Indeed, he stated that the precautionary principle is inherent in the notion of the provisional measure, and that it can be seen as a 'logical consequence' of the need to ensure that the situation would not change before the court's decision.<sup>770</sup>

### *MOX Plant*<sup>771</sup>

The MOX plant dispute was between Ireland and the United Kingdom. The case involved a dispute over marine pollution under UNCLOS Convention.<sup>772</sup> Ireland was concerned about the radioactive emissions of the MOX Plant, and possible pollution in the Irish Sea. Ireland expressed its concerns by submitting cases for the UK's breach of various obligations.<sup>773</sup> The first regarded the request for a provisional measure from ITLOS, under article 290.5. This was submitted at the same time as the case for arbitration under UNCLOS, and claimed that the UK had violated its provisions by

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<sup>767</sup> See Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area: (Request for Advisory Opinion submitted to the Seabed Disputes Chamber) (Advisory Opinion), paras. 132–33.

<sup>768</sup> See *Id.* for further explanation on the link between the obligation of due diligence and the precautionary principle.

<sup>769</sup> *Id.* Para 132.

<sup>770</sup> SBT Award, supra 758, Judge Treves, separate Opinion Para 9.

<sup>771</sup> The MOX Plant Case (*Ireland v. United Kingdom*), 126 I.L.R. 334 (Int'l Trib. L. of the Sea 2001). available at [http://www.itlos.org/start2\\_en.html](http://www.itlos.org/start2_en.html) (hereinafter MOX Plant)

<sup>772</sup> Ireland also argued that UK had breached its obligation under the UNCLOS by failing to cooperate with Ireland to protect the marine environment under articles 197 and 123.

<sup>773</sup> EU, also, commenced a proceeding against Ireland in the ECJ claiming that by bringing the case to ITLOS, Ireland had violated the exclusive jurisdiction of the ECJ included in article 292 of the EC treaty and article 193 of the 1957 treaty EAEA.

polluting the Irish Sea.<sup>774</sup> Another case was submitted under OSPAR, which argued that the UK was obliged to make data available to Ireland regarding the emissions and accidents of the MOX Plant.<sup>775</sup> Nevertheless, for the purpose of this study, the analysis will focus on the tribunal's decision with respect to the provisional measure, where Ireland grounded its argument on the precautionary principle.<sup>776</sup> It has been argued that the case, *on the surface*, adopted a different approach of the precautionary principle.<sup>777</sup>

Ireland sought a provisional measure from ITLOS. It requested that the tribunal grant a provisional measure to suspend the authorization of the plant, pending the Annex VII Tribunal. Ireland sought two provisional measures; first the suspension of commissioning of the plant, and second the prohibition of any transportation of radioactive waste through the Irish coastal zone. It argued that the precautionary principle justified the need for the provisional measure in the short period before the constitution of Annex VII Tribunal.<sup>778</sup> On the other hand, the UK responded that the precautionary principle could not be utilized to substitute the basic foundation of evidence.<sup>779</sup>

ITLOS was not satisfied with the evidence of a risk of serious harm provided by Ireland. Therefore, it did not find the *urgency* under articles 290.6 UNCLOS to prescribe a provisional measure. Nevertheless, it stated that 'prudence and caution' was required, and that both countries should cooperate in exchanging data on the risks concerning the operation of the MOX Plant, and should find ways to manage them appropriately.<sup>780</sup>

Judge Wolfrum was of the view that the precautionary principle was not applicable in relation to provisional measures, even if the principle was being considered as customary international law (which he believes is still a matter of discussion).<sup>781</sup> This was due to the exceptional nature of the provisional measure, and because the tribunal was bound by jurisdictional limitations, which did not allow it to anticipate the judgment in merit and evaluate the documentary evidence.<sup>782</sup> He also asserted that Ireland could not rely on the SBT award to invoke the precautionary principle. This is due to the fact that

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<sup>774</sup> Mox Plant Case, *supra* 780.

<sup>775</sup> OPSAR Arbitral Tribunal (MOX plant) Final Award, 2 July 2003, available at: <http://www.pca-cpa.org/upload/files/OSPAR%20Award.pdf>.

<sup>776</sup> This is due to the fact that the main dispute has been put an end without adjudicating on the substantive issues of the case since it faced with some overlapping jurisdiction among dispute settlement bodies.

<sup>777</sup> Kazhdan, p. 535.

<sup>778</sup> MOX Plant, *supra* 780, para 90.

<sup>779</sup> *Id.* UK written response, para. 150.

<sup>780</sup> *Id.* Ireland's request for provisional measure, para 100; Verbatim Record, 19 November 2001.

<sup>781</sup> *Id.* Judge Wolfrum, Separate Opinion.

<sup>782</sup> *Id.*



in the current case, the tribunal was asked to qualify the harmfulness of the introduction of radioactivity, without being able to assess evidence about the situation, whereas in the former case both of the parties agreed that the risk was established.<sup>783</sup>

Judge Mensah opined that the temporal competence of the tribunal imposed a constraint to deal with the request of a provisional measure. The competence is not to examine if there is a potential of prejudice of harm to the environment in abstract, but rather in the period of time pending the establishment of the annex VII tribunal. The requirement of 'urgency' delimited the competence of the tribunal. Ireland, however, could not provide enough evidence to satisfy the court that protection was necessary prior to the composition of the tribunal.<sup>784</sup>

Judge Traves however considered the precautionary principle to be relevant regarding to this case, as it might be appropriate to preserve procedural rights. The court mentioned prudence and caution relating to cooperation and exchange information, and therefore he stated that:

Compliance with procedural rights, relating to cooperation, exchange of information, etc., is relevant for complying with the general obligation of due diligence when engaging in activities which might have an impact on the environment.<sup>785</sup>

He also subscribed to the same argument made by other judges that the precautionary principle was not applied. The applicant could not demonstrate a substantial risk to the marine environment within the time frame required for the tribunal to prescribe a provisional measure.<sup>786</sup>

The context of this case is rather different in that the urgency of the situation did not require the prescription of the provisional measure. The possibility of serious damage to the environment in the duration between the provisional measure and constitution of the Annex VII tribunal was not serious enough to be viewed as necessary and urgent. Therefore, the MOX Plant case did not represent the position of ITLOS on the precaution.

#### *Land Reclamation*

This case has been claimed to reach the highest level of settlement of an international dispute involving scientific uncertainty in a co-operative manner.<sup>787</sup> In July 2003, Malaysia commenced proceedings against Singapore requesting an annex VII tribunal to

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<sup>783</sup> *Id.*

<sup>784</sup> MOX Plant, supra 780, Judge Mensah, Separate Opinion.

<sup>785</sup> MOX Plant, Judge Traves, Separate Opinion.

<sup>786</sup> *Id.*

<sup>787</sup> Foster, *Science and the Precautionary Principle in International Courts and Tribunals: Expert Evidence, Burden of Proof and Finality*. P.36.

be established to, *inter alia*, stop Singapore from land reclamation activities until an adequate EIA had been conducted.<sup>788</sup> Malaysia also sought a provisional measure from ITLOS. Singapore responded that it had taken the precautionary principle into account and made all the arrangements to avoid danger.<sup>789</sup> IT argued that Malaysia could not request the suspension of the project by invoking the precautionary principle, as there was no evidence of serious or irreversible damage.<sup>790</sup>

Malaysia claimed that Singapore's land reclamation project was causing ocean currents and also sedimentary transportation in the area, and was affecting the salinity of estuary waters and coastal erosion. These were argued to be having adverse effects on the environment and aquaculture, and also on the interests of local fishermen.<sup>791</sup> Malaysia was concerned that a long-term study was required to answer with confidence the questions regarding these changes and the effects of the disputed activity.<sup>792</sup> It was also concerned that Singapore had not conducted a full EIA of the project, and argued that an independent environmental impact assessment was a central tool of the international law of the precautionary principle. As such, it stated that Singapore should have conducted an EIA.<sup>793</sup> Moreover, Malaysia claimed that Singapore breached the obligations under the UNCLOS and general international law and also that the reclamation project infringed the precautionary principle. Malaysia argued that:

Singapore has placed itself in breach of its obligations under international law, specifically under articles ... of the Convention, and in relation thereto, article 300 of the Convention and the precautionary principle, which under international law *must direct* any party in the application and implementation of those obligations;<sup>794</sup>

Malaysia also regarded that the precautionary principle was a 'role reversal' with respect to the burden of proof. Sir Elihu Lauterpacht noted that, in accordance with the precautionary principle the party who is taking the risk-bearing activity should bear the administrative burden of proof:

One may argue about the status of the precautionary principle, but Malaysia submits that this Tribunal should not reject the widely held view that it is for the state that proposes action that may detrimentally affect the environment to show, not to itself,

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<sup>788</sup> Case concerning Land Reclamation by Singapore in and around the Straits of Johor (Malaysia v. Singapore), Provisional Measures, (8 October 2003).

(available at: <http://www.itlos.org/index.php?id=104>) para 22.

<sup>789</sup> Verbatim record of the sitting on 27 September 2003, p.32.

<sup>790</sup> Response of Singapore of 20 of September 2003, para. 141.

<sup>791</sup> Request for provisional measure, 4 September 2003, paras 5,17.

<sup>792</sup> *Id.* para. 5.

<sup>793</sup> Verbatim Record of the sitting on 25 September 2003, p. 20..

<sup>794</sup> *Id.* para 74

but to those that may be affected by it, that there is no real likelihood of harm to the environment<sup>795</sup>

The tribunal prescribed a provisional measure and asked the parties to collaborate and conduct a joint study to analyse the effects of the project and provide measures to deal with it within a year.<sup>796</sup> As a result of this co-operation the parties reached a settlement agreement, and therefore the dispute was brought to end.<sup>797</sup>

In this regard, ITLOS stated that it could not rule out that the project may have adverse effects on the marine environment'.<sup>798</sup> The court held that:

Given the *possible* implications of land reclamation on the marine environment, *prudence and caution* require that Malaysia and Singapore establish mechanisms for exchanging information and assessing the risks or effects of land reclamation works and devising ways to deal with them in the areas concerned;<sup>799</sup>

The tribunal refused to accept Singapore's request, and stated that all of the concerns 'direct Singapore not to conduct its land reclamation in ways that might cause.... *serious harm* to the marine environment'<sup>800</sup>. It also ruled that the parties must adhere themselves to the precautionary principle, and ordered the parties to cooperate in this regard.

### *Seabed Advisory Opinion*

On the 1<sup>st</sup> of February 2011, the Seabed Disputes Chamber ('the Chamber') delivered its first advisory opinion on state responsibility, in respect of private entities undertaking seabed-mining activities in international waters.<sup>801</sup> In providing its opinion on the questions that were raised, the Chamber further clarified a number of norms, principles and concepts that reinforced the environmental protection of areas beyond national jurisdiction.<sup>802</sup> The Opinion made a number of important statements, including that the precautionary principle, as formulated in the Rio Declaration, has initiated 'a trend

<sup>795</sup> *Id.* Sir Elihu Lauterpacht, advocate for Malaysia, Verbatim Record, 27 September 2003,

<sup>796</sup> *Id.* (provisional measure), para.106.1.a.i

<sup>797</sup> *Id.* award on agreed terms, September 2005.

<sup>798</sup> *Id.* para. 96.

<sup>799</sup> *Id.*, para. 99. (emphasis added)

<sup>800</sup> *Id.* paras. 96,99 and 106.2, (emphasis added).

<sup>801</sup> Seabed Advisory Opinion, *supra* 776.

<sup>802</sup> Donald Anton, Robert Makgill and Cymie Payne, 'Advisory Opinion on Responsibility and Liability for International Seabed Mining (ITLOS Case No. 17): International Environmental Law in the Seabed Disputes Chamber', *Environmental Policy and Law*, 2011, p. 4. Nauru, a member state, that was concerned about being exposed to the potential significant liabilities arising from the sponsored contractor's seabed mining activities in the area, requested that the ISA Secretary General seek an advisory opinion from the ITLOS. This was for guidance and interpretation of the relevant provisions of the ITLOS Convention in order to make an informed decision to participate in sponsorship of the activity. The questions were: what are a state's responsibilities regarding the sponsored activity; what is the extent of a state's liability; and what measures must a state take to fulfil its obligations?

towards making this approach part of customary international law’.

The Chamber considered the following key provisions, when answering the question of ‘what are a state’s responsibilities regarding the sponsored activity’: articles 139.1, 153.4 and the Annex III article 4.4 of the ITLOS Convention. According to article 139.1:

‘States Parties shall have the *responsibility to ensure* that *activities in the Area...* shall be carried out in conformity with this part...’<sup>803</sup>

The Chamber considered that the ‘responsibility to ensure’ in the article was the central issue to be interpreted. In doing so, the Chamber compared this obligation with the obligation of ‘due diligence’, which emerged from the judgment of the ICJ in the Pulp Mills case. The reason for this comparison was that both ‘due diligence’ and ‘responsibility to ensure’ are obligations of conduct, and not obligations of results. The ICJ also confirmed this.<sup>804</sup>

An *obligation to adopt regulatory or administrative measures* ... and to enforce them is an obligation of conduct. Both parties are therefore called upon, under article 36 [of the Statute of the River Uruguay], to exercise due diligence in acting through the [Uruguay River] Commission for the *necessary measures to preserve the ecological balance of the river*.<sup>805</sup>

When interpreting the treaty obligation, which in this case is ‘the obligation to ensure’, the chamber referred again to the ICJ’s decision in the Pulp mills case. In this case, the court interpreted the specific obligation to be qualified as the ‘obligation to act with due diligence’.<sup>806</sup> The ICJ court defined this obligation further as:

It is an obligation which entails not only the adoption of appropriate rules and measures, but also a certain level of vigilance in their enforcement and the exercise of administrative control applicable to public and private operators, such as the monitoring of activities undertaken by such operators.<sup>807</sup>

The Chamber further referred to the ‘International Law Commission’ in its Commentary on Article three of its Articles on Prevention of Transboundary Harm from Hazardous Activities.<sup>808</sup> These articles were adopted in 2001 to support its decision to utilize the obligation of due diligence when interpreting the treaty provision.<sup>809</sup> According to this article on the prevention of the transboundary harm, the state of origin ‘shall take all appropriate measures to prevent significant transboundary

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<sup>803</sup> United Nations Convention on the Law of the Sea (UNCLOS), Art. 139. Paragraph 4. (Emphasis added)

<sup>804</sup> Advisory Opinion, supra 776, paras 110, 111.

<sup>805</sup> Pulp mills award, supra 726, Para 187.

<sup>806</sup> Advisory Opinion. para 115.

<sup>807</sup> Pulp mills, para 197.

<sup>808</sup> International Law Commission, ‘Draft Articles on Prevention of Transboundary Harm from Hazardous Activities, with Commentaries’, *Yearbook of the International Law Commission*, II.2 (2001).

<sup>809</sup> Advisory Opinion. para 116.

harm or at any event to minimize the risk thereof.<sup>810</sup> The commentary defined this obligation as:

‘The obligation of the State of origin to take preventive or minimization measures is one of due diligence. It is the conduct of the State of origin that will determine whether the State has complied with its obligation under the present articles. The duty of due diligence involved, however, is not intended to guarantee that significant harm be totally prevented, if it is not possible to do so. In that eventuality, the State of origin is required ... to exert its best possible efforts to minimize the risk. In this sense, it does not guarantee that the harm would not occur.’<sup>811</sup>

In an attempt to define the content of the obligation of ‘due diligence’, the Chamber acknowledged its ‘variable concept’, and recognized that the content of the obligation could change from case to case due to, for instance, the new scientific evidence or the amount of the risk that was involved. Therefore, it recognized that there existed different standards of diligence.<sup>812</sup> The Chamber explained that these elements could render a measure that could have been diligent in a normal situation as being not diligent. This means that ‘the standard of due diligence has to be more severe in riskier activities’.<sup>813</sup>

With respect to the precautionary principle, the Chamber considered two sources of obligations for the states. Firstly, the precautionary principle was considered as a direct obligation, i.e. there was a direct obligation to take, among other principles, precautionary measures as reflected in the Rio Declaration<sup>814</sup>, Nodules regulation and Sulphides Regulation.<sup>815</sup> Secondly, the Chamber regarded the precautionary measures, among some other principles such as the best environmental practice and the EIA as being ‘a relevant factor in meeting the due diligence factor of the obligation to ensure’.<sup>816</sup> Therefore, the obligation of due diligence and within it the precautionary principle, were regarded as being indirect obligations. In most cases these were ‘couched as obligations to ensure compliance with specific rules’.<sup>817</sup>

In doing this, the Chamber went beyond direct obligation, and pointed out that the precautionary approach is an ‘integral part of the general obligation of due diligence ... which is applicable even outside of the scope of the regulation’.<sup>818</sup> This part of the opinion adds momentum to the application of the precaution by the tribunals. It

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<sup>810</sup> ILC, *supra* 808, art. 3

<sup>811</sup> *Id.* Commentary.

<sup>812</sup> Advisory Opinion. *supra* 776, para 117.

<sup>813</sup> *Id.*

<sup>814</sup> *Id.* para 127.

<sup>815</sup> *Id.* para 125.

<sup>816</sup> *Id.* para 123.

<sup>817</sup> *Id.* para 123.

<sup>818</sup> *Id.* para 131.

expresses the idea that even if a regulation does not include the obligation to take precautionary measures, the obligation of due diligence requires states to take all measures necessary to prevent damages where the 'scientific evidence concerning the scope and potential negative impact of the activity is insufficient', and where there are 'plausible indications of potential risk'.<sup>819</sup> Most importantly, disregarding these risks constitutes breaching the obligations of due diligence, and subsequently represents a 'failure to comply with the precautionary approach'.<sup>820</sup> Consequently, the Chamber considered that the precautionary principle was applicable through compliance with 'due diligence obligation', along with the direct obligations from the treaty and other relevant regulations. It saw the precautionary principle as a general and indirect obligation to interpret and define the scope of the obligation, which was set out in the convention as 'responsibility to ensure'.<sup>821</sup>

The link between the precautionary principle and due diligence was noted to be implicit in the SBT case, in which ITLOS held that the parties should act with 'prudence and caution to ensure that the conservation measures are taken'.<sup>822</sup> ITLOS also ruled that the measure 'should be taken as a matter of urgency'.<sup>823</sup>

The Chamber went further in commenting on the *status* of the precautionary principle by noting its incorporation into a growing number of treaties. In its view, the precautionary principle has started to become a part of Customary International Law.<sup>824</sup>

The Chamber claimed that the latter statement was clearly reinforced by the ICJ's judgment in the Pulp Mills case: that the PRECAUTIONARY PRINCIPLE may be 'relevant in the interpretation and application of the provisions of the statute' and should be read in light of the article 31.3.c of the Vienna Convention.<sup>825</sup>

The Chamber also considered 'the best environmental practice' as enshrined in the state's obligation of due diligence.<sup>826</sup> Since the Nodule regulation does not include this obligation, like the Sulphide regulation, the Chamber stated that the former should be 'interpreted in light of the development of the law'.<sup>827</sup> Regarding the EIA, the state was under a direct obligation and a general obligation of due diligence, according to the contract. It was also under customary international law, which extended beyond the

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<sup>819</sup> *Id.* para 131.

<sup>820</sup> *Id.*

<sup>821</sup> *Id.*

<sup>822</sup> SBT award, *supra* 758 para 77.

<sup>823</sup> Advisory Opinion. para 132.

<sup>824</sup> *Id.* para 135.

<sup>825</sup> *Id.* para 135.

<sup>826</sup> *Id.* para 136.

<sup>827</sup> *Id.* para 137.

scope of applying the specific provisions of the regulation.<sup>828</sup> With respect to customary international law, the Chamber quoted the decision by the ICJ in the Pulp Mills case, which considered an EIA as a requirement under general international law where there is a risk that industrial activity may have a significant adverse impact in a transboundary context or a shared resource. Perhaps most significantly, the Chamber recognized<sup>829</sup> that the obligation to conduct the EIA was both direct, under the treaty, and indirect, under customary international law.<sup>830</sup>

The Chamber reiterated the due diligence requirements set out in the Pulp Mills case, and went further by finding that the precautionary principle, as expressed in principle 15 of the Rio Declaration, formed part of customary international law. As such the Chamber considered the precautionary principle to be part of a state's due diligence obligations. The Advisory Opinion was the first express statement by an international court that the precautionary principle should form part of customary international law. It was also the first time it had reached a unanimous decision. The Chamber held that the measures taken by a state to fulfil its responsibilities must include having laws in place to ensure environmental due diligence. Contractual arrangements with the sponsored entity are not sufficient. 'Rather, states must ensure that there are appropriate laws, monitoring and enforcement to ensure that a sufficient level of due diligence is achieved.'. The Chamber's unanimous opinion set the highest standards of due diligence, and endorsed a legal obligation to apply precaution, best environmental practices, and EIA.<sup>831</sup>

In General, ITLOS has treated the precautionary principle as customary international law.<sup>832</sup> Therefore, it lowered the standard of proof and in some cases even reversed the burden of proof. The ITLOS Seabed Dispute Chamber, most recently, considered principle 15 of the Rio Declaration a 'trend towards making the [precautionary] approach part of customary international law'.<sup>833</sup> With no doubt, this decision set a new trend towards application of the principle in future cases or by other tribunals.

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<sup>828</sup> *Id.* paras. 145-150.

<sup>829</sup> David Freestone, 'Advisory Opinion of the Seabed Disputes Chamber of International Tribunal for the Law of the Sea on 'Responsibilities and Obligations of States Sponsoring Persons and Entities With Respect To Activities in the Area'', *American Society of International Law*, ASIL Insights, 15.7 (2011), p. 3.

<sup>830</sup> Advisory Opinion, para 145.

<sup>831</sup> Freestone, 'Advisory Opinion of the Seabed Disputes Chamber of International Tribunal for the Law of the Sea on "Responsibilities and Obligations of States Sponsoring Persons and Entities With Respect To Activities in the Area"'.  
<sup>832</sup> Kazhdan, p. 533.

<sup>833</sup> Advisory Opinion, *Supra* 776, paras 127 and 135.

#### 4.5 *WTO Jurisprudence*

The WTO has a very specific procedure when it comes to measures taken by member states aimed at environmental and health protection. The specific criteria and substance of the precautionary-like measures under the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) has prevented the application of the precautionary principle.<sup>834</sup> Therefore, these cases are only relevant in highlighting the awareness of the tribunals of uncertainty, and to the extent to which they recognize the measures being taken by the member states despite uncertainty. Therefore, as mentioned above, the cases in this section were not used to establish the content of the principle. The requirements and the criteria for its application are very specific, which justifies the fact that the WTO has treated the scientific evidence and the precautionary principle differently. The WTO's SPS Agreement sets strict criteria for health and environmental regulation, to be fulfilled by member states, and the WTO Appellate Body has clarified that the precautionary principle does not prevail over the SPS provisions. However, it is important to consider cases in which the tribunals mostly attempted to balance environmental and health concerns with the liberalization and economic restrictions to free trade that the disputed measure or legislation might have caused.

The first provision designed to grant some room for the member state to protect the environment and human health can be found in Article XX of the General Agreement on Tariffs and Trade (GATT). This allows governments to act on trade to protect human, animal or plant life or health, provided that this does not amount to a disguised protectionism or discrimination.<sup>835</sup> In addition, two specific WTO agreements, namely the SPS Agreement and the WTO Agreement on Technical Barriers to Trade (TBT Agreement), deal with food safety, animal and plant health and safety, and with technical product standards in general. Both agreements attempt to identify how states could achieve their own level of protection, and at the same time avoid protectionism in disguise. The precautionary principle was embraced into SPS agreements as a result of the Uruguay Round negotiations. However, its formation is still unclear. The SPS

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<sup>834</sup> Agreement on the Application of Sanitary and Phytosanitary Measures, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 493 (hereinafter SPS Agreement), available at: [http://www.wto.org/english/docs\\_e/legal\\_e/15-sps.pdf](http://www.wto.org/english/docs_e/legal_e/15-sps.pdf).

<sup>835</sup> Article XX: 'Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures:.... (b) necessary to protect human, animal or plant life or health.'



agreement is essentially designed to respond to member states' concerns regarding their ability to adopt measures and regulations to protect the area of the sanitary and phytosanitary. These measures might be considered non-tariff barriers to trade.<sup>836</sup> It also prevents these measures from being protectionist by setting some *requirements* for the measure to be acceptable. Most importantly in the context of this chapter, the measures should be based on risk assessment and scientific justifications.

While under the SPS agreement, the measures must typically be scientifically justified according to article 2.2<sup>837</sup> and 5.1<sup>838</sup>. Article 5.7, on the other hand, provides some room for the member states to act on trade in the face of *insufficient scientific evidence* with respect to the risks. Article 5.7 reads as follows:

In cases where *relevant scientific evidence is insufficient*, a Member may provisionally adopt sanitary or phytosanitary measures on the basis of *available pertinent information*, including that from the relevant international organizations as well as from sanitary or phytosanitary measures applied by other Members. In such circumstances, Members *shall* seek to obtain the *additional information* necessary for a more objective assessment of risk and *review* the sanitary or phytosanitary measure accordingly *within a reasonable period of time*.<sup>839</sup>

In *Japan-Varietals*, which marked the first occasion in which Article 5.7 was interpreted, the panel established a cumulative four-step-test based on the wording of the article:

- '1) the measure is imposed in respect of a situation where 'relevant scientific information is insufficient';
- 2) the measure is adopted 'on the basis of available pertinent information';  
... and obligation to
- 3) 'seek to obtain the additional information necessary for a more objective assessment of risk';
- 4) 'review the ... phytosanitary measure accordingly within a reasonable period of time'.<sup>840</sup>

The first part of this test requires the measure to be where there is insufficient relevant scientific evidence.

In the *Japan-Apple* case, Japan challenged the statement made by the panel regarding Article 5.7 that 'Article 5.7 is intended to address only situations where little, or no,

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<sup>836</sup> Bryan Mercurio and Dianna Shao, *A Precautionary Approach to Decision Making: The Evolving Jurisprudence on Article 5.7 of the SPS Agreement* (Rochester, NY: Social Science Research Network, 23 July 2011), p. 200 .

<sup>837</sup> SPS agreement, Article 2.2: Members shall ensure that any sanitary or phytosanitary measure is applied only to the extent necessary to protect human, animal or plant life or health, is based on scientific principles and is not maintained without sufficient scientific evidence, except as provided for in paragraph 7 of Article 5.

<sup>838</sup> *Id.* Article 5.1: Members shall ensure that their sanitary or phytosanitary measures are based on an assessment, as appropriate to the circumstances, of the risks to human, animal or plant life or health, taking into account risk assessment techniques developed by the relevant international organizations.

<sup>839</sup> Article 5.7, SPS Agreement.

<sup>840</sup> Panel Report, Japan – Measures Affecting Agricultural Products, WT/DS76/R (hereinafter Japan–Varietals II). Para. 8.54.

reliable evidence was available on the subject matter at issue’.<sup>841</sup> It argued that by this reasoning, the panel had restricted the application of the article to ‘new uncertainty’, and had excluded ‘unresolved uncertainty’.<sup>842</sup> According to Japan, new uncertainty ‘arises when a new risk is identified’, and unresolved uncertainty is an ‘uncertainty that the scientific evidence is not able to resolve, despite accumulated scientific evidence’.<sup>843</sup> Nevertheless, the Appellate Body (AB) interpreted this requirement by stating that *insufficient scientific evidence* is different from *scientific uncertainty*. They therefore stated that the two terms could not be used interchangeably.<sup>844</sup> The AB went further by stating that Article 5.7 is triggered not by scientific uncertainty but by insufficient scientific evidence.<sup>845</sup> This implies a rather strict application of the precautionary principle, since scientific uncertainty is a much broader concept than having insufficient scientific evidence to conduct a risk assessment.<sup>846</sup> In the same case, the AB further clarified the threshold of ‘insufficient scientific evidence’ by stating that it included cases where the ‘available evidence is more than minimal in quantity, but has not led to reliable or conclusive results’.<sup>847</sup>

The terms ‘reliable and conclusive’ are arguable according to each member state however, and states have room for manoeuvring when determining their level of reliability and conclusiveness. Moreover, it should be noted that ‘sufficient scientific evidence’ as mentioned in Article 2.2 is different from Article 5.7. While the former assesses if scientific evidence is strong enough to justify a measure, the latter is applicable where the scientific evidence is *not* even strong enough to conduct a risk assessment.<sup>848</sup>

Although the AB in the *EC-Hormone* case confirmed that Article 5.7 reflects the precautionary principle, the statement it made in the Japan-Apple case clearly restricted the application of the principle. This demonstrated that even though the article implied a precautionary approach, it did not represent the criteria of the principle as it appears in

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<sup>841</sup> Panel Report, Japan – Measures Affecting the Importation of Apples, WT/DS245/R (hereinafter Japan–Apples), para. 8.219.

<sup>842</sup> Appellate Body Report, Japan–Apples, para. 183.

<sup>843</sup> Appellate Body Report, Japan–Apples, para. 183.

<sup>844</sup> Appellate Body Report, Japan – Measures Affecting the Importation of Apples, Doc. WT/DS245/AB/R, paras 184.

<sup>845</sup> Appellate Body Report, Japan – Measures Affecting the Importation of Apples, Doc. WT/DS245/AB/R, paras 184.

<sup>846</sup> Akawat Laowonsiri, ‘Application of the Precautionary Principle in the SPS Agreement’, in *Max Planck Yearbook of United Nations Law*, Armin von Bogdandy and Rüdiger Wolfrum (Netherlands, 2010), XIV, p. 578.

<sup>847</sup> Appellate Body Report, *Japan – Measures Affecting the Importation of Apples*, Doc. WT/DS245/AB/R, paras 181 et seq.

<sup>848</sup> Mercurio and Shao, *supra* 844, p. 202..

international environmental law. Therefore, one should be aware of the specific context of the precaution in WTO case law.

Despite attempts by the panel and AB to establish a framework and produce practical results in the *Japan-Varietal* and *Japan-Apple* cases, the decision in the *EC-Biotech* case has been, according to some commentators, problematic in its interpretation of Article 5.7.<sup>849</sup> The EU had conducted a risk assessment prior to adopting the measure, which implied that it had sufficient scientific evidence to conduct the study. This allowed the court to dismiss the EC's justification by invoking article 5.7, since it was outside the scope of this article.<sup>850</sup> In relation to this last statement, the panel specified that:

Determination of whether scientific evidence is sufficient to assess the existence and magnitude of a risk must be *disconnected* from the intended level of protection<sup>851</sup>

In this reasoning, the panel did not consider the relevance of Article 3.3, which allows member states to choose a 'higher level' of protection,<sup>852</sup> or its interaction with Article 5.7. It has been argued that the sufficiency of evidence should be linked to a states' level of protection because what might be considered sufficient for a *lower* level of protection might not be sufficient for a *higher* level of protection.<sup>853</sup>

With respect to the second part of the test, which states that a measure has to be adopted 'Based on available pertinent information', it should be noted that *pertinent information* is obviously different from *relevant scientific evidence*. According to a commentator, it should therefore be interpreted in a way that includes data other than 'published scientific literature' i.e. public values, recognized public deliberations etc. This is based not on *science* but on *values*, which vary from country to country.<sup>854</sup>

Prior to this agreement there was no instrument that specifically endorsed precautionary thinking in the field of public health.<sup>855</sup> The 'precautionary' approach or principle does

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<sup>849</sup> *Id.* p. 206.

<sup>850</sup> Panel Report, *European Communities – Measures Affecting the Approval and Marketing of Biotech Products*, WT/DS291/R, WT/DS292/R, WT/DS293/R (Sept. 29, 2006) (hereinafter EC– Biotech), para 7.3007.

<sup>851</sup> EC–Biotech Panel Report, para. 7.3238.

<sup>852</sup> Article 3 'Members may introduce or maintain sanitary or phytosanitary measures which result in a higher level of sanitary or phytosanitary protection than would be achieved by measures based on the relevant international standards, guidelines or recommendations, if there is a scientific justification, or as a consequence of the level of sanitary or phytosanitary protection a Member determines to be appropriate in accordance with the relevant provisions of paragraphs 1 through 8 of Article 5.(2) Notwithstanding the above, all measures which result in a level of sanitary or phytosanitary protection different from that which would be achieved by measures based on international standards, guidelines or recommendations shall not be inconsistent with any other provision of this Agreement.' (emphasis added)

<sup>853</sup> Mercurio and Shao, *supra* 836, p. 208.

<sup>854</sup> D. Winickoff et al., 'Adjudicating the GM Food Wars: Science, Risk, and Democracy in World Trade Law', *Yale J. Int'l L.* 30 (2005), p.113.

<sup>855</sup> D. Prévost, UNCTAD Course on Dispute Settlement: World Trade Organization - 3.9 SPS measures, 2003, 35 et seq.

not exist anywhere in the text of the SPS Agreement. Only the AB stated that the principle is reflected in the SPS agreement. The scope of the precautionary principle is not exhausted in article 5.7, as acknowledged by the AB in the EC-Hormone case, which declared that:

We agree, at the same time, with the European Communities, that there is no need to assume that Article 5.7 exhausts the relevance of a precautionary principle. It is reflected also in the sixth paragraph of the preamble and in Article 3.3.<sup>856</sup>

The AB further stressed that the specific wording of the provisions of Articles 5.1 and 5.2 of the SPS Agreement prevail over the application of the precautionary principle.<sup>857</sup>

It can be seen from the above statements that the application of the precautionary principle within the SPS Agreement is subject to a number of limitations. Firstly, SPS measures must be based on relevant international standards, unless the member state wants to introduce a higher level of protection. In this case, the measure should be consistent with the other provisions of the SPS Agreement. Other member states should prove, based on scientific justifications, that the international standards are not sufficient.<sup>858</sup> Secondly, trade restrictive measures should be allowed only if they are necessary to achieve the member state's legitimate policy objectives. This is a substantive obligation under the SPS Agreement however.<sup>859</sup> Moreover, the risks that led to the measure being adopted should be justified by scientific evidence<sup>860</sup>. Finally, when invoking article 5.7, the measure should be temporary where possible.<sup>861</sup>

Even supposing that the provision allows member states to choose a higher level of protection than the agreement, it would still confine their discretion by requiring the measures to be based on 'scientific justification'. It would also require that they should not be 'inconsistent with other provisions' of the SPS Agreement.

There is also a further point to be considered when interpreting the precautionary principle in the context of the WTO: It is inevitable to consider its meaning in public international law. The AB in the *US-Gasoline* case determined that the WTO agreement should not be read in isolation from public international law.<sup>862</sup> In interpreting the case

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<sup>856</sup> Appellate Body Report, EC Measures Concerning Meat and Meat Products, Doc. WT/DS26/AB/R, para.124.

<sup>857</sup> *id.* para.125.

<sup>858</sup> article 3.1 and 3.3 of the SPS Agreement.

<sup>859</sup> Articles 2.2 and 5.6 SPS Agreement.

<sup>860</sup> Articles 2.2 and 5.1. SPS Agreement.

<sup>861</sup> Article 5.7. SPS Agreement.

<sup>862</sup> Appellate Body Report, US-Gasoline case, Doc. WT/DS58/AB/R, para.16.

the AB states that although the precautionary principle reflects in the provision but it does not override the explicit wording of the provisions of the SPS Agreement.<sup>863</sup>

### *Cases*

Having discussed the framework in which precautionary measures should be applied, this section now aims to explore how uncertainty and the precautionary principle have been dealt with in WTO jurisprudence, with a particular focus on the SPS Agreement. Nevertheless, on account of the previous discussion, this section will not attempt to undertake a detailed case study of WTO jurisprudence, since its content and context is different. It provides more specific criteria when compared to the application of the precautionary principle in international environmental law. Emphasis will therefore be focused on the traditional interpretation of Article 5.7 by the tribunal, and on a rather unsettling judgment in the EC-Biotech case, which was modified by the AB in the *US/Canada-Continued Suspension* case.<sup>864</sup>

The *US/Canada-continued suspension* dispute was raised as a result of a series of risk assessments followed by the European Commission to adopt a regulation. The regulation in question concerned a provisional ban on meat products treated with five specific hormones. The EC justified this measure under Article 5.7 on the basis of risks that were identified in the risk assessment. However, there were insufficient or even missing data to conduct a more objective and complete risk assessment.<sup>865</sup>

The panel in the *US–Continued Suspension* case noted that, regarding four out of five of the banned hormones, no ‘critical mass’ of new evidence or information was found that could render the current scientific evidence insufficient.<sup>866</sup> The panel also determined the scope of article 5.7 narrowly. It also disregarded article 3.3 and its relevance to article 5.7. It held that the assessment of the existing risk is irrelevant to the intended level of protection by the member state.<sup>867</sup>

The AB in the *US–Continued Suspension* reversed the panel’s decision and reduced some of the inconsistencies arising out of the previous decisions, namely the EC-Biotech case which adopted the same approach. The AB affirmed that the member states could choose a higher level of protection than the existing international standards.

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<sup>863</sup> United States – Continued Suspension of Obligations in the EC – Hormones Dispute; Canada – Continued Suspension of Obligations in the EC – Hormones Dispute, US Panel report. para. 1067.

<sup>864</sup> Appellate Body Report, *US – Continued Suspension of Obligations in the EC–Hormones Dispute*, WT/DS320/AB/R . Oct. 16, 2008 (hereinafter *US–Continued Suspension*).

<sup>865</sup> *US–Continued Suspension*, Appellate Body Report, para. 44.

<sup>866</sup> *US–Continued Suspension*. US Panel report. para.7.831-7 xxx

<sup>867</sup> *Id.* para. 7.612

In this respect, it referred to article 3.3, and asserted that the existence of an international standard does not necessarily imply the sufficiency of the scientific evidence in preventing a member state from invoking Article 5.7.<sup>868</sup> Moreover, the AB stated that the previous scientific evidence could be held insufficient in the light of new studies and scientific information. It therefore lowered the threshold of ‘sufficiency’, and ruled that:

There is no indication in Article 5.7 that a WTO Member may not take a provisional SPS measure wherever a relevant international organization or another Member has performed a risk assessment. Information from relevant international organizations may not necessarily be considered ‘sufficient’ to perform a risk assessment, as it may be part of the ‘available pertinent information’ which provides the basis for a provisional SPS measure under Article 5.7...<sup>869</sup>

The AB also took into account the evolving and uncertain nature of scientific evidence, and considered that evidence might change over time, by declaring that:

Scientific evidence that may have been relied upon by an international body when performing the risk assessment that led to the adoption of an international standard at a certain point in time may no longer be valid, or may become insufficient in the light of subsequent scientific developments. Therefore, the existence of a risk assessment performed by JECFA does not mean that scientific evidence underlying it must be considered to be sufficient within the meaning of Article 5.7.<sup>870</sup>

Most importantly, The AB ruled that the risk assessments and international standards that are used by other members to demonstrate that scientific evidence is sufficient could be reasonable, but: ‘is not dispositive and may be rebutted by the Member taking the provisional SPS measure.’<sup>871</sup> Therefore, according to this statement, international standards are not affirmative and non-rebuttable. If a state *objectively* shows that the risk assessment does not sufficiently respond to their desired level of protection, and there is still is not enough scientific evidence to revise the risk assessment under Article 5.1, international standards may be rebutted.

This was a remarkable change in the interpretation of Article 5.7, in which the AB acknowledged the evolving and uncertain nature of the scientific research.<sup>872</sup> This decision also permitted member states to act more cautiously when bound by the previous interpretations of Article 5.7 to conduct a risk assessment. It extended the

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<sup>868</sup> US–Continued Suspension, Appellate Body Report, paras.685,695.

<sup>869</sup> US–Continued Suspension, Appellate Body Report, para. 695.

<sup>870</sup> Id. para. 695.

<sup>871</sup> Id. para. 696.

<sup>872</sup> Mercurio and Shao, p. 209.

operation of Article 5.7 and also gave more room to member states to determine their level of protection and their exposure to risk.<sup>873</sup>

In the *US/Canada-continued suspension* case, the ‘critical mass’ standard that was set by the panel was found by the AB to be inflexible and difficult.<sup>874</sup> Instead, the AB reversed the panel’s decision, and allowed the members states to take provisional measures. To do so, the states had to demonstrate new scientific evidence, conducted by a ‘qualified and respected source’, that placed doubt on the soundness of the existing scientific evidence.<sup>875</sup> Again, the AB’s interpretation of Article 5.7 was different from the previous standard of proof, and allowed member states to respond proactively to risky situations. The AB also took into account the precautionary principle when interpreting Article 5.7. It recognized the peculiarities of emergency situations, and held that in these situations, in which states decide based on ‘limited information’, the obligations imposed on states by Article 5.7 should be assessed in light of the ‘exigencies of the emergency’.<sup>876</sup>

Through this reasoning, the AB alleviated the existing tension in Article 5.7. While being cautious to grant it a broad discretion due to its function for exceptional circumstances<sup>877</sup>, this reasoning allowed member states to take precautionary measures based on their own perceived levels of risk.<sup>878</sup>

The AB decision in the *US/Canada-Continued Suspension* case also concerned the judicial review, defined a middle ground between de novo review and deference, and elucidated on this ambiguous situation. It clarified the member state was under duty to conduct a risk assessment, and the panel had to review that risk assessment.<sup>879</sup> The panel cannot assess the risk, since this would exceed its mandate under Article 11 of the Dispute Settlement Understanding (DSU).<sup>880</sup> In other words, it should not determine whether

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<sup>873</sup> Mercurio and Shao, p. 209.

<sup>874</sup> US–Continued Suspension, Appellate Body Report, para. 695.

<sup>874</sup> Id. paras. 699–702

<sup>875</sup> Id. para. 703.

<sup>876</sup> Id. para. 680.

<sup>877</sup> See *Japan–Varietals II* Appellate Body Report that specifically advised against a ‘too broad or flexible’ interpretation of Article 5.7. Appellate Body Report, *Japan – Measures Affecting Agricultural Products*, WT/DS76/AB/R (Feb. 22, 1999) (adopted Mar. 19, 1999), para. 80.

<sup>878</sup> Mercurio and Shao, p. 213.

<sup>879</sup> US–Continued Suspension, Appellate Body Report, para. 590.

<sup>880</sup> Article 11: Function of Panels ‘The function of panels is to assist the DSB in discharging its responsibilities under this Understanding and the covered agreements. Accordingly, a panel should make an objective assessment of the matter before it, including an objective assessment of the facts of the case and the applicability of and conformity with the relevant covered agreements, and make such other findings as will assist the DSB in making the recommendations or in giving the rulings provided for in the covered agreements. Panels should consult regularly with the parties to the dispute and give them adequate opportunity to develop a mutually satisfactory solution.’ the Understanding on Rules and Procedures Governing the Settlement of Disputes or Dispute Settlement Understanding (DSU) (annexed to the "Final Act" signed in Marrakesh in 1994).

the risk assessment is correct, but rather whether ‘coherent reasoning and respectable scientific evidence and is, in this sense, objectively justifiable’.<sup>881</sup> The AB established a step-by-step test for the panel to review the risk assessments conducted by the members:

‘ 1) identify the scientific basis upon which the SPS measure was adopted. This scientific basis need not reflect the majority view within the scientific community but may reflect divergent or minority views.

2) Having identified the scientific basis underlying the SPS measure, the panel must then verify that the scientific basis comes from a respected and qualified source. Although the scientific basis need not represent the majority view within the scientific community, it must nevertheless have the necessary scientific and methodological rigour to be considered reputable science. In other words, while the correctness of the views need not have been accepted by the broader scientific community, the views must be considered to be legitimate science according to the standards of the relevant scientific community.

3) A panel should also assess whether the reasoning articulated on the basis of the scientific evidence is objective and coherent. In other words, a panel should review whether the particular conclusions drawn by the Member assessing the risk find sufficient support in the scientific evidence relied upon.

4) Finally, the panel must determine whether the results of the risk assessment ‘sufficiently warrant’ the SPS measure at issue. Here, again, the scientific basis cited as warranting the SPS measure need not reflect the majority view of the scientific community provided that it comes from a qualified and respected source’<sup>882</sup>

This sound interpretative framework, provided by the AB, represented a step forward in the evolution of the WTO jurisprudence towards the recognition of scientific complexities, and delivered considerable improvements to the system. The panel in the *Australia–Apples* carefully followed this step-by-step test.<sup>883</sup>

Although this test provides guidance for member states to review risk assessment, the standard of review might be more relevant for the application of Articles 5.1 and 2.2, and also has important implications for Article 5.7. The test could be used to determine the sufficiency or insufficiency of scientific evidence, as an important factor that could trigger the application of Article 5.7. Moreover, it secures the room for the panel to objectively review the facts presented by a state that is adopting a precautionary measure, instead of completely deferring to its assessments regarding the insufficiency of the evidence. It provides more room for states to gather information, rather than hindering them with the rigorous and inflexible criteria provided by the previous interpretations of Article 5.7. These previous interpretations determined the sufficiency

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<sup>881</sup> Id.

<sup>882</sup> US–Continued Suspension, Appellate Body Report, para. 591

<sup>883</sup> *Australia–Apples* Panel Report, WT/DS320/AB/R (Oct. 20, 1998), paras. 7.225-7.229



of evidence based on the 'ill-defined and inconsistently applied notion of reliability'.<sup>884</sup> The new interpretation could be utilized to consider whether available scientific evidence was insufficient to conduct risk assessment. The basis of this interpretation is the recognition of the myth of unquestionable science.<sup>885</sup>

The recent decision of the WTO in the *US/Canada-Continued Suspension* case modified the interpretative framework established throughout the first ten years of the SPS jurisprudence. The approach that the WTO took towards Article 5.7 was important, as it allowed greater flexibility for member states who were genuinely concerned about the uncertain effects of a particular product. It could be said that the decision was much closer to the precautionary principle constituents under international law rather than it was to those under Article 5.7. It has been argued that the decision develops a framework to be followed in the subsequent cases.<sup>886</sup>

To conclude, although occasionally, the implied reflection of the precautionary principle in the SPS agreement was recognised, one should be aware of the fundamental difference between the exception provided under this agreement and general precautionary principle. According to di Benedetto, the WTO precautionary-like exception, offers a different perspective as it speaks of a right of the member states and not an obligation. The right to adopt restrictive measures necessary to protect human health, animal and plant. The reference to a law, which is 'derived directly from the text (may)', is consistent with the logic of the WTO legal system, where protection of the environment is allowed only as an exception to the fundamental principles of free trade'.<sup>887</sup>

#### ***4.6 Conclusion and Synthesis of the analytical framework***

Environment-related disputes, which include scientific evidence, pose new challenges on the adjudication at the international level. The challenges arise because the particular genre of the disputes, the very core of the factual elements as the basis of the judgment, are often unknown. This situation renders traditional decision-making, through the application of the laws to the facts, difficult for the courts. Moreover, on account of the often-irreversible character of damage to the environment, and of the inherent limitations in fixing those damages, courts face the task of adopting a preventive, rather

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<sup>884</sup> Mercurio and Shao, p. 218.

<sup>885</sup> Mercurio and Shao, p. 218.

<sup>886</sup> Mercurio and Shao, p. 199.

<sup>887</sup> Di Benedetto, 'La Funzione Interpretativa Del Principio Di Precauzione In Diritto Internazionale'. Unofficial Translation.

than compensatory, logic. The peculiarities of the environmental concerns, together with scientific uncertainty regarding potential risks, require more attention from courts when regarding evidentiary rules and forward-looking approaches.

This section attempted to assay how the precautionary principle has been invoked by contending parties in disputes. More importantly, it has attempted to discern whether and how courts have recognized this call. The decisions of five different international courts and tribunals were closely scrutinized, including the decisions by ECJ, ITLOS, ICJ and finally the decisions of dispute settlement bodies under the WTO Agreement. The courts, apart from the EU courts and the recent Advisory Opinion by the ITLOS, have been reluctant to expressly judge upon the principle and elaborate on its content however. There were several instances in which the contenting parties heavily relied upon the precautionary principle, but in which procedural issues prevented the courts from entering the merit phase. These decisions were criticized by Judges' dissents to be missed opportunities to elaborate on the content and framework of the principle.

The courts, particularly the EU Courts have in different instances set the criteria for the application of the principle, and have defined a threshold (above which the principle imposes a duty on the states and becomes binding). The ECJ for instance has specified that the precautionary principle cannot be based on a 'purely hypothetical approach to the risk' or on 'mere conjecture which has not been scientifically verified', but rather should be 'adequately backed up by the scientific data available'. The ECJ held that this was true even if, 'the reality and extent thereof have not been fully demonstrated by conclusive scientific evidence'. In another case, it ruled that the precautionary principle should apply where there is a 'mere probability' of harm, and not 'definitely significant effects'. When there is 'Insufficiency, inconclusiveness or imprecision' of science and there is still a 'likelihood of real harm', a measure can also be justified by the precautionary principle.<sup>888</sup>

In a landmark decision on the principle, ITLOS recognized it to be an 'integral part of the general obligation of due diligence ... which is applicable even outside of the scope of the regulation'. The obligation of due diligence requires states to take all measures necessary to prevent damages where 'scientific evidence concerning the scope and potential negative impact of the activity is insufficient', and where there are 'plausible indications of potential risk'. The implication of this reasoning is that disregarding these risks is in breach of the obligation of due diligence. Subsequently, it constitutes a 'failure

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<sup>888</sup> Case C-219/07, *Nationale Raad van Dierenkwekersen Liefhebbers VZW*, ECJ 2008, paras. 37 and 38.

to comply with the precautionary approach'. Judge Trinidad, in his dissenting opinion of the Pulp mills case, argued along the same lines that, given the recurring prevalence of scientific uncertainties in environmental concerns, the epistemology of the precautionary principle is geared to the duty of care of due diligence.

Besides the direct application of the principle under international law, precautionary thinking was also frequently found in other decisions, and was inherent in several judgments. Provisional measures were granted by courts, pending the establishment of the court, for the merits. It has been often argued that provisional measures are precautionary in nature, and are a logical consequence when ensuring that the environment is not threatened. The EIA represents another instance that is clearly required by the precautionary principle. It has been claimed to be 'a precondition for undertaking the activities, and to demonstrate that there was no risk associated with them', and is now part of customary international law.

Tribunals have also decided on the admissibility of scientific disputes and judicial reviews by ruling that the courts should not conduct scientific assessments. They should instead review if there has been a 'manifest error' or a 'misuse of powers'. In the same vein, according to the WTO the court should not conduct a new risk assessment; it should only review the assessments that have been conducted by the member state. Therefore, there exists, in this genre of disputes, a wide discretion for the public authority to decide on the objectives to be pursued, and on the choice of the appropriate means of action.

There were frequent criticisms by judges over cases that demonstrated that the precautionary principle was capable of playing a role and acknowledged its normative capacity. This criticism confirmed that the principle is not an abstract tool, and has fulfilled the criteria to be considered as a tool to assist the tribunals. Judge Trinidad has argued that:

The fact that the Court has not expressly acknowledged the existence of this general principle of International Environmental Law does not mean that it does not exist.

A carefully delineated version of the principle can be sensible and useful in dispute settlement.

While the WTO has been reluctant to admit the precautionary principle's existence as a general international law, the ECtHR<sup>889</sup> and ITLOS have been more favorable, and the ICJ has fallen somewhere in between. In the *Pulp Mills* case, the Court stated that while

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<sup>889</sup> *Tătar v. Romania*, supra **Error! Bookmark not defined.**

the principle might be relevant in interpreting and applying the statute, it does not reverse the burden of proof. At the EU level, courts have explicitly recognized the normative nature of the principle as a general principle of European law.

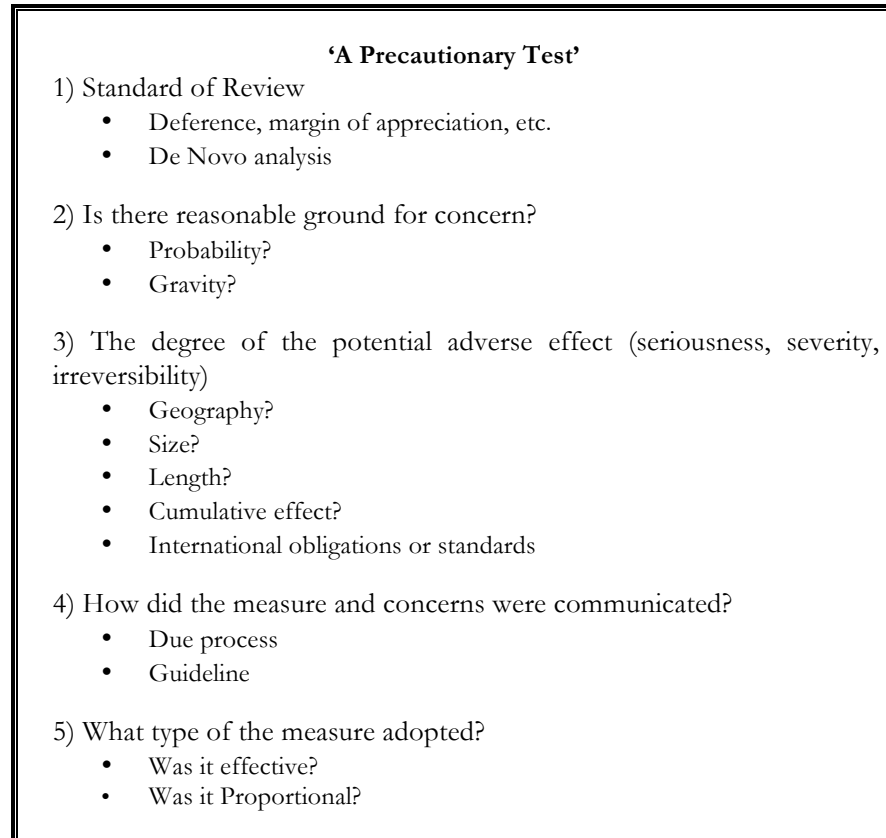
Be that as it may, in several occasions courts have applied precautionary thinking and have interpreted situations in favor of the environment. This is the essence of the principle, and the underlying objective of this study: regardless of its nonbinding nature under international law, the precautionary principle has the capacity to inform decisions. In almost all of the disputes that were mentioned in this chapter, there was a disagreement between developmental and environmental concerns, and in each case the precautionary principle was used to justify the restrictive measures, or to prevent development. Having the principle as a guiding tool is not equal to protecting the environment at any expense, and the precautionary principle requires the developments to involve zero risk. Promoting precautionary thinking requires states to not only allow any hypothetical risk to tamper any development, but also requires that policies have to meet certain criteria to be justified as precautionary measures. This is also the ultimate purpose of sustainable development.

To synthesize the findings on the precautionary principle as a conclusion of the analytical framework, both chapter 3 and chapter 4 will be considered. From the outset, this analysis aimed to introduce a benchmark based on the core elements of the precautionary principle, and also the jurisprudence on its actual application. Therefore, this chapter will conclude by integrating the entire analysis into a set of questions (figure 3) that could be used by investment tribunals to evaluate whether an environmental policy has violated the FET, or has caused regulatory expropriation.

- What is the chosen level by the tribunal to review the measure adopted by the host state? Would the tribunal defer to the capability of experts and decision makers, or would it decide to conduct a limited (as apposed to *de novo*) review to determine whether the host state had acted according to the obligations that it accepted under the relevant investment agreement.
- Did the host state have reasonable grounds for concern? How probable is the occurrence of the feared threat? What would the gravity of harm have been had the threat materialized?

- What is the degree of the potential adverse effects, taking into account the geography of the project, the length of the harmful activity, cumulative effects, the existence of international standards or obligations and fatal effects?
- How was the measure was communicated to the investor? Was the investor aware of the legal environment and the review process?
- After all other aspects of the measure have been assessed, the final question should be: was the adopted measure effective and proportional to the threat of potential harm?

This set of questions would first and foremost address the main elements of the principle, as established by various international instruments. It would also provide a background on the measure (through questions two to four), instead of beginning with the measure being out of context. The effectiveness and proportionality of the measure is crucial to assess if a measure has violated investment provisions. These questions would walk the tribunal through an important set of facts, recognized under environmental law, which triggered the measure. This would demonstrate to tribunals what the measure actually was. Compressing all of these elements into a set of questions would improve its practicality, as it is asking questions instead of listing some terms that would again be require interpretation. Thus, it would raise the chances of the precautionary principle becoming a benchmark to be applied by subsequent tribunals. In any case, enough room should be left for the specifics of each case. This thesis proved that the precautionary test provided under this thesis was not exhaustive, and could accommodate as much specificity as any one case might require. Once again, the cardinal point here is to encourage tribunals to understand what triggered the measure, and what is at stake, before deciding, based on comparisons, the loss that was imposed on the investor and the restrictive measure.



*Figure 3: Precautionary Test*

## 5 OPERATIONALIZING THE PRECAUTIONARY PRINCIPLE

### *5.1 Introduction*

Concerns over environmental protection are rising worldwide. States adopt different monitoring and ex-ante mechanisms to either address these concerns at the national level or to comply with their international obligations. Sometimes, through their vigilant supervision, states might learn that certain activities could potentially damage the environment. Among the tools that environmental law has provided for states to control environmental damages is the precautionary principle. This principle allows (and sometimes obliges) states to take actions to prevent future damage, providing they can establish that the activity in question could inflict serious or irreversible harm to the environment. As a result, depending on the level of potential harm or the nature of the activity, authorities might take different actions. Examples include the revocation of permit, the refusal to renew expired permits, the rejection or requirement of the EIA, a

temporary or permanent ban on certain products or activities, zoning decisions, etc. As a result, the developers or owners of these affected activities might suffer economic losses, compared to the time when they started their investment. This common practice for environmental protection will give the affected foreign investor a right (or opportunity) to file an investor-state dispute claiming violation of investment provisions. Consequently, investment tribunals are left to decide whether the impact of a measure adopted to prevent environmental damage is a violation of a state's obligation under an investment treaty. This would expose states to have their actions reviewed by the arbitral tribunals, who have not yet demonstrated a consistent approach towards states' efforts to monitor the environmental compliance of potentially hazardous activities.

The current trend in the current investor's claims indicates that disputed environmental components are not as straightforward as early disputes, however. While early disputes were mainly concerned with a direct ban on a product, zoning decisions and taking property for environmental purposes, recent claims have targeted the very core of monitoring and supervision mechanisms. For instance, recent disputes include claims such as the length of time that states spent to review the environmental impact of a project; the requirement to conduct an EIA due to the nature of the proposed project; the fact that states granted a renewable permit instead of a permanent one; the method that the agencies have adopted to review the project and so forth. These claims could interrupt the efficiency of states' ability to regulate and supervise potentially hazardous activities. Moreover, since these claims focus more on the way investors were treated; they could create more complexity for the tribunals deciding on treaty violation.

Previously, in the second chapter, it was argued that tribunals have so far been inconsistent on what is or is not a violation (in terms of environmental protection measures). This unpredictability exposes genuine environmental protection as well, and the subject matter relates to whether these concerns might be a treaty violation, rather than whether the state had protectionist concerns. The main research question of this study examined if the precautionary principle, not only as a legal principle but also as a modern tool for environmental management, could assist tribunals in interpreting the investment treaty provisions. In other words, the aim is to encourage investment tribunals to take into account current environmental concerns in an objective and systematic way, through the precautionary principle. The result of its application is

expected to expand objectivity in environment-related investment dispute settlement by using a benchmark to assess the disputed measures.

Be that as it may, identifying a legal principle is entirely different from applying it under international law. To view the text of the treaty and come up with an understanding that allows application of the precautionary principle, tribunals must act through the medium of treaty interpretation. This is given under article 31-33 VCLT, as the general rules of treaty interpretation.<sup>890</sup> The main objective of this chapter is to analyse the possible ways to introduce the precautionary principle as a tool in investment treaty interpretation. This analysis would also demonstrate that the principle, as a non-binding instrument, could be applied to assist tribunals in raising crucial questions that would greatly influence the outcome of the relevant disputes. This argument not only serves the main research question, but also responds to the criticism that lacking a binding effect and a normative character, the precautionary principle cannot be applicable.

To provide sufficient justification for operationalizing the precautionary principle, this chapter is divided into three sections: theoretical justification, practical justification and case evaluation. The section on theoretical justification will introduce two different routes, both passing through the general rules of treaty interpretation, to serve as gateway for the incorporation of precautionary principle in the interpretation of the investment provisions. This will make the principle more digestible, even for opponents. The first suggested route is the textual reading of the investment treaty, which also calls for an evolutionary approach to treaty interpretation. The second route is the fashionable concept of the 'systemic integration' through Article 31.3.c VCLT.

Assuming that the first section provides sufficient theoretical methods to support the possibility of this transposition, the second section will further elaborate on why an investment tribunal would, or should, consider applying a principle under environmental law to interpret the provisions of investment treaty. The third section evaluates the feasibility of all of the arguments in this thesis. It will look at three different cases and examine how influential the precautionary principle would have been, had the tribunal applied it. The final section features a more speculative outlook that will act as an example of what this research has argued about.

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<sup>890</sup> United Nations Convention on the Law of Treaties, Signed at Vienna 23 May 1969.



## 5.2 *Theoretical Justification*

### 5.2.1 Evolutionary interpretation

The text of the treaty is the first thing to look at. For instance, ‘fair and equitable treatment’ and ‘expropriation’ are the text of the treaty that investors have mostly claimed to be violated in environment-related cases. Therefore the arbitrator’s task is, first and foremost, to look at these provisions and find out what the treaty requires from the host state. Evidently, treaty interpretation only comes in if the text itself is not clear and requires investigation into its meaning, to enable the tribunal to apply it to the facts of the case. Although, according to the rule of treaty interpretation as encapsulated in Article 31 of the Vienna Convention on the Law of Treaties, the starting point would be the ordinary meaning of the treaty text, international law must be introduced into the analysis of a claim under an investment treaty in the first place, through the medium of treaty interpretation.<sup>891</sup>

The first consideration should be the vague provisions of the investment treaties, which call for interpretations, before applying these provisions to the facts. One well-supported reason for reaching out to the precautionary principle is the incomplete language of the treaties or investment protection provisions. The tribunals must interpret these and attempt to fill in the gaps. Schill stated that investment treaties include ‘the most notorious and vaguely crafted treaty provisions’, such as FET.<sup>892</sup> Walde also argued that Article 31.3 VCLT can be used to ‘fill the open-ended language of the main investment obligations in treaties by reference to the common core of the over 3,000 bilateral.’<sup>893</sup>

It is argued that judgments in practice are based on factual context, and not simply on formal rules and legal doctrines.<sup>894</sup> However, this is not to claim that legal texts and doctrine have less importance, but rather to argue that they are insufficient to understand the judicial interpretation and the outcomes of the cases.<sup>895</sup> This assumes a more active role for the tribunals:

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<sup>891</sup> McLachlan, ‘The Principle of Systemic Integration and Article 31(3)(C) of the Vienna Convention’, p. 372.

<sup>892</sup> Stephan W Schill, *supra*, 90 p. 135.

<sup>893</sup> Thomas Waelde, ‘Interpreting Investment Treaties: Experiences and Examples’, in *International Investment Law for the 21st Century: Essays in Honour of Christoph Schreuer*, ed. by Christina Binder and others (Oxford ; New York: OUP Oxford, 2009), p. 732.

<sup>894</sup> Gregory C. Shaffer and Mark Pollack, ‘Hard v. Soft Law: Alternatives, Complements, and Antagonists in International Governance’, *Minnesota Law Review*, 94 (2010), p. 750.

<sup>895</sup> *Id.*

Judges are viewed as situated decision makers who respond to disputes in light of particular social, political, and historical contexts which shape their views of the facts of a particular case. The texts of agreements are seen as having a degree of malleability (or incompleteness) that can be adapted (or filled out) in light of these contexts.<sup>896</sup>

Judges or tribunals charged with interpreting such treaties perform a gap-filling function, which, according to Reisman, is to perform ‘supplementing task when lacuna exist in the applicable law’. They do this by taking into account non-legal issues, including the ‘wider implications of the law and the community agreed policies’.<sup>897</sup> Therefore, the role of judges as gap-fillers in interpreting incomplete agreements could encourage the application of soft law and guiding tools to fill these gaps. In such interpretative functions, soft-law provisions can indirectly inform the interpretation and application of the hard law texts, and hence they can shape the outcome of the decisions.<sup>898</sup>

As the first step, tribunals are required to start by looking at the text of the treaty and its ordinary meaning. This should be considered in the light of the original object and purpose of the treaty. According to Article 31.1 VCLT:

A treaty shall be interpreted in good faith in accordance with the *ordinary meaning* to be given to the terms of the treaty in their context and in the light of its *object and purpose*.<sup>899</sup>

This section raises two important issues. First is the interpretation in light of the object and purpose. In this case, the crucial question is the object and purpose of the investment treaties. Secondly, the principle of contemporaneity should also be considered. According to this principle the terms of a treaty must be interpreted according to the ‘meaning, which they possessed, or which would have been attributed to them, and in the light of current linguistic usage, at the time when the treaty was originally concluded’.<sup>900</sup> This raises the question of whether the tribunal should look for the meaning of those provisions at the time of conclusion of that particular treaty, or at the time of its application.

As highlighted previously, due to the vague provisions of the investment treaties, the terms should be interpreted in light of their object and purpose. However, interpreting a

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<sup>896</sup> *Id.* p.749.

<sup>897</sup> Michael Reisman, ‘Case Specific Mandates’ versus “Systemic Implications”: How Should Investment Tribunals Decide?: The Freshfields Arbitration Lecture’, *Arbitration International*, 29.2 (2013), 131–52 (pp. 149–50).

<sup>898</sup> Shaffer & Pollack, *supra* 912. p.751

<sup>899</sup> Article 31.1 VCLT, *supra* 890.

<sup>900</sup> Gerald Fitzmaurice, ‘Law and Procedure of the International Court of Justice 1951-4: Treaty Interpretation and Other Treaty Points’, *British Year Book of International Law*, 33 (1957), 203 (p. 212).

treaty provision according to its object and purpose is not a straightforward task. As a matter of fact, there are diverging views among scholars with respect to the object and purpose of investment treaties. One argument is that the object and purpose of the BITs is to promote investment. This is achieved by defining the rights of foreign investors and the duties of the host states, in connection with the protection of international investment. This means that the vague provisions will be interpreted according to the investor's benefit, and according to the extent that they were disturbed by the host states' measures. For instance, in *MTD v. Chile*, the tribunal specified that it would interpret the provision of the BIT 'in the manner most conducive to fulfil the objective of the BIT *to protect investments and create conditions favourable to investments*'.<sup>901</sup> Other instances of the same view include *Siemens v. Argentine*, in which the object of the treaty was considered to '*create favourable conditions for investments and to stimulate private initiative*',<sup>902</sup> *Azurix v Argentina*, in which the tribunal simply defined the purpose of the treaty '*to encourage and protect investment*'<sup>903</sup> and also *SGS v. Philippines*, in which the tribunal referred to the narrow treaty preamble that dictates 'It is legitimate to resolve uncertainties in its interpretation so as to *favour the protection of covered investments*'.<sup>904</sup>

Considering the history of the investment regime and the triggers for its occurrence, this approach might seem valid. However, it is also true that the object and purpose of a treaty is an evolving concept. Furthermore, the purpose of drafting a treaty in 1970s, as an emergency response to extensive expropriatory policies, has changed.<sup>905</sup> Aside from evolving concept, most modern investment treaties do not state that the protection of

<sup>901</sup> *MTD Equity Sdn. Bhd. and MTD Chile S.A. v. Republic of Chile*, supra 45. para 104.

<sup>902</sup> *Siemens v. Argentine Republic*, Decision on Jurisdiction, at para 81.

<sup>903</sup> *Azurix Corp. v. The Argentine Republic*, ICSID Case No. ARB/01/12, Award of 12 May 2005, Award, 2006. para. 372.

<sup>904</sup> *SGS Société Générale de Surveillance S.A. v. Republic of the Philippines*, case No ARB/02/6 of. January 29, 2004. para 116. Also: *Tokios Tokelés v. Ukraine*, ICSID Case No. ARB/02/18. Decision on Jurisdiction, 29 April 2004. para. 85: 'the object and purpose of the BIT is to provide broad protection for investors and their investments.' *Sempra Energy International v Argentina*, ICSID Case No. ARB/02/16, Decision on Jurisdiction, 11 May 2005. para. 142 'the clear intention was to provide full protection for investors.' For a more 'enlightened' view see *Joseph Charles Lemire v. Ukraine*, ICSID Case No. ARB/06/18, Decision on Jurisdiction and Liability, 14 January 2010. paras. 272-73. However, it is argued that its not the tribunals to be blamed as their reading of the object and purpose are not indefensible, but rather he believes that it is for the governments to draft the treaty preambles in such a way that it reflects the prerogatives of the states to regulate in public interest. Therefore having a more balanced preamble could help to ensure that tribunals 'do not view it as 'legitimate' to resolve uncertainties in treaty interpretation so as to favour investor interests'. Luke Eric Peterson, 'Bilateral Investment Treaties and Development Policy-Making', *International Institute for Sustainable Development*, 2004, p. 24.

<sup>905</sup> The logic behind this argument is that BIT's developed as a necessity to cope with an emergency situation which was the extensive expropriation policies in 1960's. After the efforts to draft an international agreements failed, BITs took over. The 1962 draft convention on protection of foreign assets and its provisions, argued to be the model based on which all major investment exporting countries, all being OECD members, prepared their BITs in other words, it acted like a model treaty.

foreign investment is the only object and purpose, but rather that it is only one of the treaty's several objects and purposes.<sup>906</sup> This was also confirmed by the WTO Appellate Body in *Shrimp* case, which ruled that 'most treaties have no single, undiluted object and purpose but rather a variety of different, and possibly conflicting, objects and purposes.'<sup>907</sup>

Some tribunals have assented to this approach. For instance, the *Saluka* tribunal started with the ordinary meaning and referred to the *SD Myer*<sup>908</sup> tribunal's finding to interpret the FET. They asserted that the ordinary meaning could not provide much insight.<sup>909</sup> The tribunal then referred to the immediate and broader context of the provision, which allowed the object and purpose of the treaty to be discerned from its title and preamble.<sup>910</sup> Looking at the preamble of the treaty, which indicated that its objectives were investment promotion and economic development, the tribunal noted that:

The protection of foreign investments is not the sole aim of the Treaty, but rather a necessary element alongside the overall aim of encouraging foreign investment and extending and intensifying the parties' economic relations. That in turn calls for a balanced approach to the interpretation of the Treaty's substantive provisions for the protection of investments, since an interpretation which exaggerates the protection to be accorded to foreign investments may serve to dissuade host States from admitting foreign investments and so undermine the overall aim of extending and intensifying the parties' mutual economic relations.<sup>911</sup>

Another example is the *LG&E* tribunal, who focused on the (apparently) broader language in the preamble of the investment treaty, and stated that 'in entering the BIT' as

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<sup>906</sup> See *Saluka* award, supra 41. paras. 299–300; Thomas Waelde, 'Interpreting Investment Treaties: Experiences and Examples', in *International Investment Law for the 21st Century: Essays in Honour of Christoph Schreuer*, ed. by Christina Binder and others (Oxford; New York: OUP Oxford, 2009); Jan Klabbbers, 'Some Problems Regarding the Object and Purpose of Treaties', *Finnish Y.B. Int'l L.* 8, 138; Zachary Douglas, 'Nothing If Not Critical for Investment Treaty Arbitration: Occidental, Eureka and Methanex', *Arbitration International*, 22.1 (2006), 27–52 (p. 51); David S. Jonas and Thomas N. Saunders, 'The Object and Purpose of a Treaty: Three Interpretive Methods', *Vanderbilt Journal of Transnational Law*, 43.3 (2010), 565 (p. 579) arguing that: 'The command to interpret a treaty 'in light of its object and purpose' suggests a holistic mode of interpretation that accounts for more than the goals of specific treaty provisions and encompasses the normative logic that presents itself when the entirety of the treaty's provisions are considered together'; On evolutionary interpretation see: Bruno Simma, 'Foreign Investment Arbitration: A Place for Human Rights?', *International & Comparative Law Quarterly*, 60.03 (2011), 573–96 (p. 583); Rudolf Bernhardt, 'Questions for Mark Clodfelter and David A. Gantz', *South Texas Law Review*, 42 (2001), 1303 (p. 14).

<sup>907</sup> United States Import Prohibition of Certain Shrimp and Shrimp Products, Appellate Body Report, WT/DS58/AB/R (1998) at para. 17.

<sup>908</sup> 'treatment in such an unjust or arbitrary manner that the treatment rises to the level that is unacceptable from the international perspective' S.D. Myers award. para. 263.

<sup>909</sup> *Saluka* Award, supra 41. para. 297.

<sup>910</sup> *Id.* para. 299.

<sup>911</sup> *Id.* para. 300.

a whole, the parties' desire is to 'promote greater economic cooperation' and 'stimulate the flow of private capital and the economic development of the parties'.<sup>912</sup>

To justify different interpretation of the object and purpose in general, some have argued that there is a distinction between the 'object' and 'purpose' of a treaty. This distinction should be taken into account when one looks into the object and purpose of a treaty to interpret a provision. Simply put, the 'object' is the substantial content of the treaty, including the provisions, rights and obligations created by the treaty, whereas, the 'purpose' is the reason for establishing the substantial content of the treaty.<sup>913</sup> Following this methodology, it is claimed that the object of the investment treaties, is protection of foreign investment. This is common among the many treaties signed since 1959 between Germany and Pakistan. The purpose however, according to the treaties, is to improve economic development among the contracting parties, in addition to increasing prosperity and encouraging international capital flow.<sup>914</sup> According to one commentator, the object of the treaty is the means to achieve its main purpose:

The investment protection guarantees provided for in the body of the treaty are the instruments with which to encourage capital flows between the two countries and in turn contribute to the prosperity (or development) of both contracting parties.<sup>915</sup>

Aligned with the same argument, Douglas emphasises that the promotion of foreign investment is not the *raison d'être* of the treaty; it is only one of the key objectives of concluding the investment treaties. Therefore, the policy of favouring the protection of

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<sup>912</sup> *LG&E Energy Corp., LG&E Capital Corp., and LG&E International, Inc. v. Argentine Republic*, ICSID Case No. ARB/02/1. Decision on Liability, October 3, 2006. para. 124.

<sup>913</sup> see Jan Klabbbers, *supra* 906. p. 138; It is suggested that the distinction becomes relevant since focusing only on the purpose of the treaty is to prevent excessive teleological interpretation, which might result in making the provisions of treaty irrelevant as long as the aim and purpose of the treaty is fulfilled. Whereas by including the object in the interpretation the substantive provisions of the treaty are linked to the purpose and aim of the treaty. Isabelle Buffard and Karl Zemanek, 'The "Object and Purpose" of a Treaty: An Enigma?', *Austrian Review of International and European Law (ARIEL)*, 3.1 (1998), 311–43 (p. 332).

<sup>914</sup> The preamble to the 1959 Germany-Pakistan BIT reads as follows: DESIRING to intensify economic cooperation between the two States, INTENDING to create favourable conditions for investments by nationals and companies of either State in the territory of the other State, and RECOGNIZING that an understanding reached between the two States is likely to promote investment, encourage private industrial and financial enterprise and to increase the prosperity of both the States, HAVE AGREED AS FOLLOWS'. The preamble to the 2009 Germany-Pakistan BIT reads as follows: 'Desiring to intensify economic co-operation between both States, Intending to create favourable conditions for investments by investors of either State in the territory of the other State, Recognizing that the encouragement and protection of such investments can stimulate private business initiative and increase the prosperity of both Contracting States, Have agreed as follows'.

<sup>915</sup> Ortino, *supra* 95 p. 4.

foreign investment ‘cannot be invoked to determine the rights and obligations of the parties to a particular investment dispute on the merits.’<sup>916</sup>

The preamble and objective of the great majority of early treaties are defined as ‘prosperity’ and ‘development’.<sup>917</sup> The trend however changed in 1990’s to accommodate broader objectives, such as economic growth and, more recently, sustainable development.<sup>918</sup> The long-term purpose of the treaty is becoming increasingly important in treaty interpretation, as is development in both states.<sup>919</sup> Following the increasing attention to the concept of sustainable development, the meaning of economic development has also evolved, as Van den Berge states:

Economic development describes the full range of changes in humanity’s economic, social, and natural environments that are perceived by people as making life more pleasant and satisfying.<sup>920</sup>

There are many arguments supporting the idea that increasing foreign investment does not necessarily cause economic growth by itself.<sup>921</sup> It is a multifaceted goal, and as noted in a publication by the World Bank:

It is important to remember that development is far more complex than simply economic growth ... Development is also the qualitative transformation of a whole society, a shift to new ways of thinking, and, correspondingly, to new relations and new methods of production. Moreover... transformation qualifies as development only if it benefits most people— improves their quality of life and gives them more control over their destinies.<sup>922</sup>

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<sup>916</sup> Zachary Douglas, ‘Nothing If Not Critical for Investment Treaty Arbitration: Occidental, Eureko and Methanex’, *Arbitration International*, 22.1 (2006), 27–52 (p. 51); Jan Klabbbers, *supra* 906. p. 147.

<sup>917</sup> 1961 Switzerland-Tunisia BIT; 1965 Belgium/Luxembourg-Morocco BIT; 1975 United Kingdom-Egypt BIT; 1985 Italy-Tunisia BIT; 1979 Netherlands-Senegal BIT; in those years, post-war period, prosperity meant economic growth.; 1962 OECD Draft Convention on the Protection of Foreign Property recognized the ‘importance of promoting the flow of capital for economic activity and development’.

<sup>918</sup> A trend that gradually started after the *Stockholm Conference* (The United Nations Conference on the Human Environment, Stockholm, Sweden from June 5–16 in 1972).

<sup>919</sup> Richard Gardiner, *Treaty Interpretation*, Reprint edition (Oxford University Press, U.S.A., 2010), pp. 196–199.

<sup>920</sup> Hendrik Van den Van den Berg, *Economic Growth and Development*, 2 edition (Hackensack : World Scientific Publishing Company, 2012), p. 28. He also argues that ‘The complexity of the process of economic development and its interactions with our greater social and natural environments requires us to move beyond the familiar economic relationships studied by orthodox, or mainstream, economics. Gaining an understanding of our complex human existence is a difficult task. To be successful, we need to formally recognize the interdependence of social and natural phenomena. And, we need to adopt an efficient method for increasing our knowledge about this complex reality. The perspective we take in this textbook is called holism, our approach to economic modeling is heterodox, and our method of analysis seeks to follow the steps of the scientific method.’ Ibid at 29.

<sup>921</sup> See Karl P. Sauvant and Lisa E. Sachs, *The Effect of Treaties on Foreign Direct Investment: Bilateral Investment Treaties, Double Taxation Treaties, and Investment Flows* (Oxford England ; New York: OUP USA, 2009).

<sup>922</sup> Tatyana P. Soubbotina, *Beyond Economic Growth, Second Edition* (The World Bank, 2004), p. 123.

After all, although some commentators have made a distinction between the treaty's 'immediate' goal, and its 'distant' purpose,<sup>923</sup> the issue has hardly been mentioned by international practice. Some have suggested that they both should be regarded as one notion.<sup>924</sup> Klabbers argues that object and purpose are not abstract terms; instead they are rather flexible and their meaning depends to a large extent on:

The characteristics of that situation; it depends not only on the treaty itself which may be at issue, but also, as argued above, on the particular treaty-problem concerned. As such, object and purpose is and will remain indeed an utterly flexible notion, able to cater to various needs and different circumstances.<sup>925</sup>

The next crucial point on the object and purpose of treaties is the issue of the temporal reference point of interpretation. Most investment treaties have been concluded for a long period of time, and the language and meaning of the provisions have been affected by the passage of time. The question is whether the interpretation concerns the meaning at the time of conclusion of the treaty, or the time of interpretation. While the former does not factor the passage of time, and is rather a static and subjective approach, the latter is more dynamic and evolutionary. As a result it provides for a more objective interpretation.<sup>926</sup>

Crawford supported the concept of evolutionary interpretation as a way to 'bring a treaty up to speed with modern times', and regarded it as nothing more than the 'expression of the traditional canons of treaty construction'.<sup>927</sup> Bjorge argued that evolutionary interpretation is not a new method of interpretation; it is a natural part of the classical canons of treaty interpretation under article 31-33 of the VCLT.<sup>928</sup>

In *Costa Rica v. Nicaragua* a dispute before the ICJ, regarding interpretation of the 1858 Treaty, the Court was of the opinion that whether the meaning of the word 'commerce' has changed since 1858 is irrelevant. They ruled that the matter only concerned the

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<sup>923</sup> Elizabeth Zoller, *La bonnefoi en droit international public* (1977) p. 74. Quoted in Klabbers, supra 906. p. 144.

<sup>924</sup> For a detailed analysis on different literature and decisions regarding the object and purpose see Jan Klabbers, supra 929. p. 138.

<sup>925</sup> *Id.* p. 160. See also: Julian Arato, 'Subsequent Practice and Evolutive Interpretation: Techniques of Treaty Interpretation over Time and Their Diverse Consequences', *Law & Practice of International Courts and Tribunals*, 9.3 (2010), p. 467.

<sup>926</sup> *The Charter of the United Nations: A Commentary*, ed. by Bruno Simma and others, 3rd. edition (Oxford, United Kingdom: OUP Oxford, 2012), p. 35.

<sup>927</sup> James Crawford, foreword on Eirik Bjorge, *The Evolutionary Interpretation of Treaties* (Oxford University Press, 2014). p. v.

<sup>928</sup> Bjorge, supra 927. Although, Simma believes that this type of interpretation is more suited for some type of treaties than it is for others such as human rights jurisprudence: Bruno Simma, 'Mainstreaming Human Right: the Contribution of the International Court of Justice: Community Interest Coming to Life?' in CJ Tams and Sloan (eds), *The Development of International Law by the International Court of Justice* (Oxford University Press, 2013), p. 323.

‘present meaning’ of the term. The Court justified its opinion by stating that first, since the states used a ‘generic term’ as commerce they must be ‘necessarily... aware that the meaning of the terms was likely to evolve over time’.<sup>929</sup> Secondly, when a treaty has a ‘continuing duration’, parties to the treaty ‘intended [generic] terms to have an evolving meaning’.<sup>930</sup> Later, the Court in *Pulp Mills* cited this decision, and asserted that the obligation to ‘protect and preserve’ under the 1975 Treaty has to be interpreted:

In accordance with a practice, which in recent years has gained so much acceptance among State...to undertake an environmental impact assessment where there is a risk that the proposed industrial activity may have a significant adverse impact in a transboundary context.<sup>931</sup>

Therefore, the argument under this subsection is that although the investment treaty provisions were initiated to protect the interest of foreign investor in the host country, the current practice of state reveals that it is no longer the main purpose. The same states and organisations that promoted investment protection have demonstrated their determination to promote sustainable development. As a demonstration of evolving objectives, the *OECD 1962 Draft Convention on Protection of Foreign Assets* acted as a model treaty for most of the BITs that exist today.<sup>932</sup> It is worth noting that the same organisation issued a series of guidelines in 1976 regarding the *International Investment and Multinational Enterprises*.<sup>933</sup> In the background to the 2011 update, the OECD stated that:

Since the last review of the Guidelines in 2000, the landscape for international investment and multinational enterprises has continued to change rapidly. The world economy has witnessed new and more complex patterns of production and consumption. Non-OECD countries are attracting a larger share of world investment and multinational enterprises from non-adhering countries have grown in importance. At the same time, the financial and economic crisis and the loss in confidence in open markets, the need to address climate change, and reaffirmed international commitments to development goals have prompted renewed calls from governments, the private sector and social partners for high standards of responsible business conduct.<sup>934</sup>

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<sup>929</sup> see also, Julian Arato, *supra* 943. p. 468; Eirik Bjorge, *supra* 945. p. 9.

<sup>930</sup> *Dispute regarding Navigational and Related Rights (Costa Rica v. Nicaragua)*, ICJ Reports 2009, p 243. para. 66.

<sup>931</sup> *Pulp Mills on the River Uruguay*, Judgment of April 20, 2010, ICJ Reports 14 (2010). para 204.

<sup>932</sup> Patrick Juillard, *Bilateral Investment Treaties In The Context Of Investment Law*, Investment Compact Regional Roundtable on Bilateral Investment Treaties for the Protection and Promotion of Foreign Investment in South East Europe (Dubrovnik, Croatia: OECD, 28 May 2001).

<sup>933</sup> *Declaration and Decisions on International Investment and Multinational Enterprises* 1976, revised several times, the last update is 2011 Update of the OECD Guidelines for Multinational Enterprises: its about duties of MNEs as an initiation by the OECD to define the rights and duties of both sides as apposed to the BITs which are the rights of the MNEs and duties of the sovereign states.

<sup>934</sup> 2011 Update of the OECD Guidelines for Multinational Enterprises, <http://www.oecd.org/daf/inv/mne/2011update.htm>.



In the 2011 guideline<sup>935</sup> there is a chapter on the environment, which acknowledges the importance of environmental protection and its role in sustainable development in its commentary. It even recognises the action of the Multinational Enterprises to be based on the precautionary approach and an ex ante basis:

Several instruments already adopted by countries adhering to the *Guidelines*, including Principle 15 of the Rio Declaration on Environment and Development, enunciate a 'precautionary approach'. None of these instruments is explicitly addressed to enterprises, although enterprise contributions are *implicit* in all of them.<sup>936</sup>

The main idea of this series of guidelines was to ensure that foreign investors are in harmony with government policies to contribute to sustainable development,<sup>937</sup> and also to encourage governments to improve the welfare of their people.<sup>938</sup> The guideline also emphasised that there should not be any contradiction between the activity of foreign investors and sustainable development.<sup>939</sup> The reason for highlighting some parts of these documents was not for their applicability; instead it was to demonstrate how the objective and perspective can evolve within the same institution. A simple glance into the current focus of global organisations uncovers how the focus has changed. Therefore, the outcome of the argument for evolutionary interpretation is not to deny the importance of the obligations to which states have committed themselves. The

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<sup>935</sup> A review of the statements by the OECD as the provider of the first concepts of the BITs is important and necessary in the sense that it demonstrates the change of the objective and purpose (The concept is the same from the legal standpoint but the issues that are raised in 1960's and 70's are not the same as current issues as stated by the OECD in the previous paragraph.) of the BITs from the point of view of the same organization (and its members) and the evolving nature of the concerns.

<sup>936</sup> *OECD Guidelines for Multinational Enterprises*, Recommendations for responsible business conduct in a global context, Text and Commentary, 2011, id. Commentary on the Environment, 68, p. 45-46. Available at: <http://www.oecd.org/daf/inv/mne/48004323.pdf>.

<sup>937</sup> In the preface, the objective of the guideline is explained as 'The Guidelines aim to ensure that the operations of these enterprises are in harmony with government policies, to strengthen the basis of mutual confidence between enterprises and the societies in which they operate, to help improve the foreign investment climate and to enhance the contribution to sustainable development made by multinational enterprises'; Also Principle 1 requires that: 'MNEs should contribute to economic, environmental and social progress with a view to achieving sustainable development.'<sup>937</sup>

<sup>938</sup> In the preface 'Governments can also help by maintaining and promoting appropriate standards and policies in support of sustainable development and by engaging in on-going reforms to ensure that public sector activity is efficient and effective. Governments adhering to the Guidelines are committed to continuous improvement of both domestic and international policies with a view to improving the welfare and living standards of all people.'

<sup>939</sup> Commentary on the general principle 'There should not be any contradiction between the activity of multinational enterprises (MNEs) and sustainable development, and the Guidelines are meant to foster complementarities in this regard. Indeed, links among economic, social, and environmental progress are a key means for furthering the goal of sustainable development.' Also in the introduction to the chapter on Environment it stated that 'Enterprises should, within the framework of laws, regulations and administrative practices in the countries in which they operate, and in consideration of relevant international agreements, principles, objectives, and standards, take due account of the need to protect the environment, public health and safety, and generally to conduct their activities in a manner contributing to the wider goal of sustainable development.'

argument instead highlights the stance of those commitments, under the current practice of the same states that originally agreed to commit to those treaties.

Therefore, adopting evolutionary interpretation in the context of this research means that a tribunal could interpret the poorly defined provisions of FET and indirect expropriation according to the object and purpose of the investment treaty, and also according to the current practice of the states. Jonas & Saunder proposed that:

The command to interpret a treaty ‘in light of its object and purpose’ suggests a holistic mode of interpretation that accounts for more than the goals of specific treaty provisions and encompasses the normative logic that presents itself when the entirety of the treaty's provisions are considered together.<sup>940</sup>

Building on the arguments based on an evolutionary interpretation of investment treaties, the assumption is that the long-term purpose of most treaties could be considered to be sustainable development (or sustainable economic development) for both parties. Nevertheless, integrative decision-making is at the heart of the concept of sustainable development.<sup>941</sup> This practice requires a complex and delicate balancing exercise, as the needs of the future depend crucially on how well we balance economic, environmental and social objectives that might be in conflict with one another.<sup>942</sup> The 2002 *Johannesburg Declaration on Sustainable Development* confirms this point by declaring that states have:

Collective responsibility to advance and strengthen the interdependent and mutually reinforcing pillars of sustainable development—economic development, social development and environmental protection—at the local, national, regional and global levels.<sup>943</sup>

The central point in sustainable development is that there is no theoretical deduction to achieve its goals. The determination of the balance is not found in the concept itself; this is left for the decision makers. Accordingly, it is argued that sustainable development is a *process* that the decision maker engages in, making the link between the

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<sup>940</sup> Jonas and Saunders, p. 579.

<sup>941</sup> Philippe Sands Principles of International Economic Law (Cambridge, CUP 2003) at 263. On the Principle of integration as a ‘fundamental component of sustainable development’. There are, in fact, other key elements identified with the concept of sustainable development such as inter-generational equity to preserve natural resources for the benefit of future and also to ensure that all people within the current generation are able to meet their basic needs (Ortino p. 12). Nevertheless, integrative decision making as the main point is aimed to balance all the needs and ensure that the goal of the concept actually happens.

<sup>942</sup> Ortino. P. 13

<sup>943</sup> Johannesburg Declaration on Sustainable Development, in Report of the World Summit on Sustainable Development, A/CONF. 199/20 (New York: United Nations, 2002) paragraph 5.

three elements of economics, social and environmental in each specific case.<sup>944</sup> In other words, it is about taking all the elements into account. As one commentator suggests:

The actual outcome of a given balancing exercise will crucially depend on the relevance given, by the decision-maker, to the various economic, environmental and social needs at issue in the specific case. In this sense, the principle of integration focuses on establishing an appropriate process capable of achieving sustainable development rather than providing the result of that balance.<sup>945</sup>

Consequently, in light of the fact that sustainable development is the underlying long-term purpose of the investment treaty (as argued above), it could be concluded that the broad terms employed in investment treaties, such as fair and equitable treatment or indirect expropriation, must be interpreted in accordance with their current object and purpose of the applicable investment treaty existing at the time of the application of treaty. The precautionary principle, as one of the most crucial components of sustainable development, could be relevant in interpreting the treaty provisions, in light of the current object and purpose of the investment treaties.

Nevertheless, the evolutionary interpretation of investment treaties has certain limits. For instance, if the investment treaty expressly refers to economic prosperity it would be hard to translate it to sustainable development through evolutionary interpretation. This is because the idea of sustainable development only has become popular since the late 1990's.<sup>946</sup> Thus, as much as the broad interpretation of the object and purpose could serve the function of the investment tribunals, they should avoid becoming 'interventionist' by using a 'presumptive approach' such as evolutionary criteria to make 'aging treaties' fit with modern concerns.<sup>947</sup> As Walde suggests, the goal should be a realistic degree of 'path coherence' that is:

A gradual and cautious evolution which draws its legitimacy from a style of interpretation that is and appears to be reasonably faithful to the authoritative text. A major means of achieving greater coherence is by accepting a concept of persuasive and, if jurisprudence is settled, binding precedent.<sup>948</sup>

### 5.2.2 Systemic integration

The second suggested path is the principle of systemic integration. This principle which is based on the article 31.3.c VCLT, enables tribunals to interpret the provisions of

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<sup>944</sup> Alan Boyle and David Freestone *International Law and Sustainable Development* (OUP, 1999) at 17-18.

<sup>945</sup> Ortino. P. 16

<sup>946</sup> *Id.* p. 11.

<sup>947</sup> Robin McCaig, 'The Further Evolution of The Evolutionary Approach to Treaty Interpretation', *The Cambridge Law Journal*, 69.02 (2010), 250-52 (p. 252).

<sup>948</sup> Waelde, 'Interpreting Investment Treaties: Experiences and Examples', pp. 780-81.

investment treaties according to the elements of the precautionary principle. After explaining the characteristics and requirements of this significant aspect of interpretation, this section will consider two different characters that article 31.3.c could give to the precautionary principle: general and specific. The general application of the principle is attainable by going beyond the boundaries of orthodox sources of international law. Specifically, this involves taking into account non-binding instruments as serviceable tools to inform interpretation. The second and more limited application of the principle is through the obligation of due diligence, as acknowledged by ICJ and ITLOS decisions.

The interest in Article 31.3.c VCLT has become more significant following the ICJ decision on *Oil Platforms* in 2003,<sup>949</sup> along with a later report by the Study Group of the International Law Commission (ILC) on the *Fragmentation of International Law* (the 'Fragmentation Report 2006').<sup>950</sup> The idea of this report is that treaties should not be applied and interpreted in a vacuum. The principle of 'systemic integration', embodied in article 31.3.c, operates like a 'master key to the house of international law'.<sup>951</sup> The Court used the rule for the first time in the *Oil Platforms* case, which was later cited by other tribunals.<sup>952</sup>

The principle has two connected and co-dependent aspects, namely, integrative and evolutionary.<sup>953</sup> The first aspect promotes harmony among the regimes as much as possible,<sup>954</sup> while the latter interprets the treaty in light of the normative environment of the present day. These two aspects should be taken into account when an external rule is being relied upon to interpret a treaty provision. According to the article 31.3.c, the external element should meet three criteria to be qualified for application. It should be (i) relevant, (ii) any rules of international law and (iii) applicable between the parties.<sup>955</sup>

#### 5.2.2.1 (i) *Relevance*

<sup>949</sup> Case Concerning Oil Platforms (*Islamic Republic of Iran v. United States of America*), 2003. ICJ.

<sup>950</sup> ILC, *Fragmentation of International Law: Difficulties Arising From the Diversification and Expansion of International Law*, A/CN.4/L.682 (2006), available at [http://untreaty.un.org/ilc/documentation/english/a\\_cn4\\_l682.pdf](http://untreaty.un.org/ilc/documentation/english/a_cn4_l682.pdf)

<sup>951</sup> ILC group final report at 211. Para 420.

<sup>952</sup> Salucka award para 254

<sup>953</sup> Julian Arato, 'Constitutional Transformation In The ECtHR: Strasbourg's Expansive Recourse To External Rules Of International Law', *Brooklyn Journal of International Law*, 37.2 (2012), 349 (p. 353).

<sup>954</sup> Fragmentation Report, precautionary principle 414–17.

<sup>955</sup> Bruno Simma and Theodore Kill, 'Harmonizing Investment Protection and International Human Rights: First Steps Towards a Methodology', in *International Investment Law for the 21st Century: Essays in Honour of Christoph Schreuer*, ed. by Christina Binder and others (Oxford ; New York: OUP Oxford, 2009), p. 679 (p. 695).

As per the first element, there are some narrow definitions of the ‘relevance’, which only allow external rules that are directly related to the subject matter.<sup>956</sup> However, more recent studies seem to display a broader characterisation of the term. According to Simma and Kill, ‘It is fair to conclude, that treaty interpreters are free to embrace the flexibility inherent in the term ‘relevant’.<sup>957</sup> Gardiner also supported this broader view by defining relevance:

As referring to those [rules] touching on the same subject matter as the treaty provision or provisions being interpreted or which in any way affect that interpretation.<sup>958</sup>

In the same way, Foster conceded that dispute settlement should revolve around the terms of investment treaties. The refinements of terms originating from later inter-State negotiations and state practice should be made in their public international law context.<sup>959</sup> In order to introduce international law into their interpretation, it is important that investment tribunals:

Took into account the relevant sources of international law and fitted its decision into the larger framework of international investment protection, thereby aiming to achieve the consistency in arbitral jurisprudence which is expected by users, both investors and states, of the system of international investment protection and arbitration.<sup>960</sup>

The Court in *Iron Rhine*, on the relevance of the environmental law to interpret the treaty referred to both binding and nonbinding instruments when stating that:

The emerging principles, whatever their current status, make reference to conservation, management, notions of prevention and of sustainable development, and protection for future generations.<sup>961</sup>

In doing so, the Court referred to the importance of several environmental instruments as an integral part of economic development:

Importantly, these emerging principles now integrate environmental protection into the development process. Environmental law and the law on development stand not as alternatives but as mutually reinforcing, integral concepts, which require that where development may cause significant harm to the environment there is a duty to prevent,

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<sup>956</sup> Only those rules that are directly applicable to the subject matter of the treaty. Henn-Jüri Uibopuu, ‘Interpretation of Treaties in the Light of International Law: Art. 31, Para. 3(c) of the Vienna Convention on the Law of Treaties’, *ANNUAIRE DE L’A.A.A.*, 40.1 (1970), p. 4.

<sup>957</sup> Simma and Kill, p. 696.

<sup>958</sup> Gardiner, p. 260.

<sup>959</sup> Foster, p. 527.

<sup>960</sup> Stephan W. Schill, ‘Crafting the International Economic Order: The Public Function of Investment Treaty Arbitration and Its Significance for the Role of the Arbitrator’, *Leiden Journal of International Law*, 23 (2010), 401–30 (p. 425).

<sup>961</sup> *Iron Rhine* para 58

or at least mitigate, such harm. This duty, in the opinion of the Tribunal, has now become a principle of general international law.<sup>962</sup>

The Court also cited the *Gabčíkovo-Nagymaros* decision to stress the importance of integrating environmental concerns with economic interests. It emphasised that ‘the need to reconcile economic development with protection of the environment is aptly expressed in the concept of sustainable development’, and stated the fact that ‘new standards given proper weight, not only when states contemplate new activities but also when continuing with activities begun in the past’<sup>963</sup>. The Court considered a memorandum of understanding relevant in interpreting the obligation of the parties to the treaty, regardless of its nonbinding nature.

These opinions of the Court and scholars, together with the nature of the precautionary principle as a way to enhance monitoring development for their environmental impact qualify it as being ‘relevant’ in environment-related investment disputes. When a tribunal has to decide whether a disputed measure adopted to allegedly prevent a potential environmental harm is discriminatory, unfair, unexpected, indirect expropriation and so forth, the precautionary principle becomes the most relevant among all the principles.

#### 5.2.2.2 (ii) *Rule of international law*

The second element, the ‘rule of international law’, in general seems to have a clear scope. Scholars accept that the article enables courts and tribunals to refer to the relevant binding rules of international law when interpreting a treaty.<sup>964</sup> Whether nonbinding instruments are accepted, however, is still open to debate.<sup>965</sup> Most scholars agree that the rules of international law mean the traditional sources of international law as listed in the Statute of the ICJ at Article 38(1). Namely, these are customary norms, treaties and general principles of law.<sup>966</sup> This was emphasised by the ILC Fragmentation Report, and many scholars agree that judges should be aware of the expansive interpretation and ensure that what they apply under this article does, in fact, exist as a

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<sup>962</sup> Iron Reine para 59

<sup>963</sup> *Gabčíkovo-Nagymaros* (Hungary/Slovakia), Judgment, I.C.J. Reports 1997, p. 7 at p. 78, para. 140

<sup>964</sup> M.E. Villiger, *Commentary on the 1969 Vienna Convention on the Law of Treaties*, p. 433 (Nijhoff 2009); Gardiner, *supra* n. 6, at pp. 267-268; McLachlan, *supra* n. 17, at pp. 290-291; and ILC, *Fragmentation of International Law*, *supra* n. 5, at secs. 425-426.

<sup>965</sup> Gardiner, *supra* n. 6, at p. 268.

<sup>966</sup> Fragmentation Report, para 426 ‘rules of law, and not to broader principles or considerations which may not be firmly established as rules.’; GARDINER, *supra* note 23, at 267–68; Simma & Kill, *supra* note 20, at 695; McLachlan, *supra* note 20, at 290–91;

rule.<sup>967</sup> Some scholars are cautious with regard to the scope of article 31(3)(c) in relation to non-binding materials. Specifically, Orakhelashvili argues that article 31(3)(c):

Covers only established rules of international law, to the exclusion of principles of uncertain or doubtful legal status, so-called evolving legal standards, policy factors or more generally related notions.<sup>968</sup>

However, ECHR makes an example by departing from this approach and ‘marches far beyond the border of the list of sources in the ICJ Statute’ by systematically articulating a wide range of sources of international law, in addition to the traditional sources.<sup>969</sup> The most illustrative case is *Demir and Baykara v. Turkey*, in which the Court had to interpret an agreement between a civil service trade union and the Turkish municipality.<sup>970</sup> The court noted that:

[W]hen [the Court] considers the object and purpose of the Convention provisions, it also takes into account the international law background to the legal question before it. Being made up of a set of rules and principles that are accepted by the vast majority of States, the common international or domestic law standards of European States reflect a reality that the Court cannot disregard when it is called upon to clarify the scope of a Convention provision that more conventional means of interpretation have not enabled it to establish with a sufficient degree of certainty.<sup>971</sup>

The Court also confirmed that:

The consensus emerging from specialised international instruments... may constitute a relevant consideration for the Court when it interprets the provisions of the Convention in specific cases.<sup>972</sup>

Thus, the Court extended its use of article 31.3.c by asserting competence to consider the non-binding materials such as observations, recommendations and products of committees and organisations. The ECHR has no institutional connection whatsoever with these materials however.<sup>973</sup> In the same way, when referring to the non-binding materials Alvarez avowed that:

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<sup>967</sup> fragmentation 119. Simma kill 695.

<sup>968</sup> A. Orakhelashvili, *The Interpretation of Acts and Rules in Public International Law* p. 366 (OUP Press 2008); see also M.E. Villiger, *Commentary on the 1969 Vienna Convention on the Law of Treaties*, p. 433 (Nijhoff 2009);

<sup>969</sup> Arato, ‘Constitutional Transformation In The ECtHR: Strasbourg’s Expansive Recourse To External Rules Of International Law’, p. 376. ‘In General the ECHR has relied on a maximally broad construction of VCLT 31(3)(c) to expand the substantive rights of the Convention’.

<sup>970</sup> ECtHR, 12 Nov. 2008, *Demir and Baykara v. Turkey*, Judgement No. 34503/97 . sec 60.

<sup>971</sup> *Id.* sec. 76.

<sup>972</sup> *Id.* sec. 85.

<sup>973</sup> European Union recommendations; the European Social Charter, which is not ratified by Turkey; 101-102 turkey case, also interpretations attributed to this charter by the Charter’s Committee of Independent Experts(turkey case 45-51 and 103-105.); the Court adopted the same approach and relied upon non-binding instruments in other cases as well. For instance: United Nations High Commissioner for

Such observations and recommendations, though non-binding in a legal sense, may exert a strong compliance-pull from the individual States to whom they are directed, especially because they are attached to onerous reporting requirements.<sup>974</sup>

Be that as it may, whether the precautionary principle meets the requirement of being a rule of international law heavily depends on the approach adopted by tribunals. A close analysis of its status as a soft law is warranted to justify the aptness of the principle as a rule of international law (therefore allowing it to be applied through 31.3.c). This could justify how non-binding instruments could reflect the rule of international law.

#### *Nonbinding rules of international law*

Due to the complexity and dynamism of contemporary international law-making, legal standards may emerge through different instruments, regardless of their nature.<sup>975</sup> The instruments that generate soft law include, but not limited to, declarations, guidelines, resolutions, treaties and recommendations of international organizations. Each represents different contexts, significance, degrees of effectiveness and institutional settings, as Boyle suggests:

While the legal effect of these different soft law instruments is not necessarily the same, it is characteristic of all of them that they are carefully negotiated, and often carefully drafted statements, which are in some cases intended to have some normative significance despite their non-binding, non treaty form. There is at least an element of good faith commitment, and in many cases, a desire to influence state practice and an element of law-making intention and progressive development.<sup>976</sup>

Soft law and its applicability has been a subject of vast controversy.<sup>977</sup> The orthodox classification of the sources of international law is generally cited from article 38 (1) ICJ Status. According to them, treaty and customary international law are the primary sources with binding nature; the rest is non-binding, to a point that Prosper Weil insisted the sublegal (and non-binding) obligations 'are neither soft law nor hard law:

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Refugees (UNHCR) guidelines, Council of Europe recommendations and a recommendation of the UN Working Group on Arbitrary Detention UK: ECtHR, 29 Jan. 2008, *Saadi v. The United Kingdom*, Judgement No. 13229/03, secs. 29-37; in *Al-Adsani* the Court in its interpretation, referred to the Universal Declaration of Human Rights as well as to a decision of the International Criminal Tribunal for the Former Yugoslavia, (UK: ECtHR, 21 Nov. 2001, *Al-Adsani v. United Kingdom*, Judgement No. 35763/97.)

<sup>974</sup> Jose E. Alvarez, *International Organizations As Law-Makers* (Oxford University Press, U.S.A., 2006), pp. 224–29.

<sup>975</sup> Mauro Barelli, 'The Role Of Soft Law In The International Legal System: The Case Of The United Nations Declaration On The Rights Of Indigenous Peoples', *International and Comparative Law Quarterly*, 58 (2009), 957 (p. 959).

<sup>976</sup> A. E. Boyle, 'Some Reflections on the Relationship of Treaties and Soft Law', *International & Comparative Law Quarterly*, 48.04 (1999), 901–13.

<sup>977</sup> Andrew T. Guzman and Timothy L. Meyer, *International Soft Law*, 2 J. Legal Analyses 171 (2010), p. 172. Available at: <http://scholarship.law.berkeley.edu/facpubs/695>.



they are simply not law at all'.<sup>978</sup> On the other hand, many scholars have made arguments regarding the development of international law and its sources, and have distanced themselves from the traditional classification of its sources. They have also highlighted the importance, applicability and benefits of acknowledging soft law among the sources as a critical instrument in dispute settlement.<sup>979</sup>

With respect to soft law it is important to note that in this study hard law and soft law are not used as two opposite terms. As Shelton states, using the term “soft law” is more appropriate for the more promotional language of certain treaty provisions than the instruments concluded in nonbinding form, since, even if some specific commitments are drafted in a general or weak terms, treaties are legally binding.<sup>980</sup> In this thesis soft law is not used to demonstrate the binary view of international law in which hard law and soft law form two ends of a continuum from legal obligation to complete freedom.<sup>981</sup> Soft law is used to mean nonbinding, which according to Shelton ‘have complex and potentially large impact on the development of international law’ but by no means this would reduce the normative impact of those norms.

Modern sources of international law are not restricted to the traditional sources as stated in Art. 38 ICJ Statute, but include emerging principles of international law, as pointed out by several commentators. According to Weiss, traditional international law, which is limited to laws between states, is no longer the sole international legal focus. Non-binding legal instruments concluded by governments and international organizations have now become very substantial sources of international law.<sup>982</sup> Boyle also argues that:

the subtlety of the processes by which contemporary international law can be created is no longer adequately captured by reference to the orthodox categories of custom and treaty. The role of soft law as an element in international law-making is now widely appreciated, and its influence throughout international law is evident.<sup>983</sup>

Therefore, soft law, as a modern source of international law in addition to the traditional sources, could assist tribunals in their decision. In other words, binding and

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<sup>978</sup> Prosper Weil, ‘Towards Relative Normativity in International Law?’, *American Journal of International Law*, 77 (1983), 413 (p. 417).

<sup>979</sup> Gabrielle Kaufmann-Kohler, ‘Soft Law in International Arbitration: Codification and Normativity’, *Journal of International Dispute Settlement*, 1.2 (2010), 283–99 (p. 15).

<sup>980</sup> Dinah Shelton, ‘Normative Hierarchy in International Law’, *THE AMERICAN JOURNAL OF INTERNATIONAL LAW*, 100.2 (2006), 291–323 (p. 319).

<sup>981</sup> *Id.*

<sup>982</sup> Edith Brown Weiss, ‘The Rise or the Fall of International Law?’, *Fordham Law Review*, 69.2 (2000), 345 (p. 346). ‘These instruments exist in all areas of international law, although they appear to be more abundant in human rights, environment, and financial dealings than in trade and national security.’

<sup>983</sup> A. E. Boyle. *Supra* 994.

non-binding legal norms complement each other in the fabric of international investment law. This enriches investment law and allows tribunals to resort to soft law instruments in order to shed light on ‘open-textured terms’ in investment treaties.<sup>984</sup> Tribunals have discretion over whether or not to apply it, however in practice soft law often influences investment tribunals. According to Hirsch, the application of the soft law serves three functions in investment arbitration, interpreting ambiguous provisions, filling gaps in existing international law and supporting legal findings arising from other sources of investment law.<sup>985</sup> Foster also argues that:

The adjudicatory tradition in public international law is based on the hope that international courts and tribunals will be able to determine the actual facts of a case, and the expectation that they will apply substantive rules and principles of international law to these facts.<sup>986</sup>

In fact, the legal significance of soft law instruments not only as interpretative tools that might be used to shed light on the vaguely formulated provisions of investment treaties but also as potentially creating a source of legal obligation has been recognised by numerous investment treaty tribunals.<sup>987</sup>

More importantly, legal obligations continue to be associated with ‘greater expectation of conforming behaviour and consequences for non-compliance’. It comes as no surprise that states have also become concerned about ‘compliance with other forms of

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<sup>984</sup> Moshe Hirsch, ‘Sources of International Investment Law’, in *International Investment Law and Soft Law*, ed. by Andrea K. Bjorklund and August Reinisch (Edward Elgar Publishing, 2012), p. 38.

<sup>985</sup> Id. p. 31.

<sup>986</sup> Foster 527.

<sup>987</sup> Amongst the cases in which soft law has been relied upon by the tribunals as an interpretative tool or as creating a source of obligation. include: *Daimler Financial Services AG v. Argentine Republic*, ICSID Case No. ARB/05/1, in which the tribunal used the World Bank Guidelines on the Treatment of Foreign Direct Investment 1992 as an interpretative tool; in *Grand Rivers Enterprise et al v. USA*, UNCITRAL Arbitration, award January 2011, tribunal used the *Universal Declaration of Human Rights*, Articles 17 & 19 of the *United Nations Declaration on the Rights of Indigenous Peoples* as interpretative tool to shed light on the obligation to afford FET under NAFTA Art. 1105 as including a requirement on the Respondent to take “pro-active” steps to consult indigenous investors prior to imposing a measure that will impact upon them or their community; In *Glamis v. USA*, supra 49, tribunal used 1968 UNESCO *Recommendation concerning the Preservation of Cultural Property Endangered by Public or Private Works* as interpretative tool to shed light on the interpretation of FET under NAFTA Art. 1105; in *Desert Line Projects LLC v. The Republic of Yemen*, ICSID Case No. ARB/05/17, tribunal used the UNGA Resolution 1803 on Permanent Sovereignty over Natural Resources adopted in 1962 as interpretative tool to shed light on the interpretation of the content FET as including the obligation not to coerce the foreign investor; in *Biwater v. Tanzania*, tribunal used the *United Nations Committee on Economic, Social and Cultural Rights in 2002* as tool of interpretation to shed light on the interpretation of FET under the applicable BIT and held that access to clean water as a basic human right serves as a limitation of the legitimate expectations of the foreign investor; and in *CME v. Czech Republic*, tribunal observed that UNGA Resolution 1803 (XVII) adopted on 14 December 1962, and the Charter of Economic Rights and Duties of States adopted on 12 December 1974 had the effectively undermined the validity of the Hull formula on compensation for expropriation as a “generally accepted international standard.” (para. 31).

international commitment.<sup>988</sup> States and international institutions have adopted non-binding legal norms through soft law texts that are political commitments. These can later lead to law (custom, treaty or general principle). These soft law instruments, although lacking a binding character, are sometimes used to ‘interpret and fill the gaps in the law’.<sup>989</sup> This role is precisely what this thesis is advocating as the function of precautionary principle for investment tribunals, with respect to environment-related investment disputes.

Treaty rules are effective for requiring more serious commitments, but they are not necessary more authoritative. Supporting the impact of the soft law, Boyle took the example of the *Rio Declaration*, which intended to develop some new law. He referred to its universal support and consensus, and argues that it is not obvious that a treaty with the same provision would ‘carry greater weight or achieve its objectives any more successfully’.<sup>990</sup> He also took the example of the FCCC, adopted at the 1992 Rio conference, as a treaty that imposes commitments to the parties but has core articles that are very vaguely drafted. Boyle suggested that one could question their binding force, but that it is hard to ignore their legal significance. He claimed that these principles:

May lay down parameters which affect the way court decide cases or the way an international institution exercises its discretionary powers. They can set limits, or provide guidance, or determine how conflicts between other rules or principles will be resolved. They may lack the supposedly harder edge of a ‘rule’ or an ‘obligation’, but they are certainly not legally irrelevant. As such they constitute a very important form of law, which may be ‘soft’, but which should not be confused with ‘non-binding’ law.<sup>991</sup>

By extending this argument to other principles, such as sustainable development and the precautionary principle, Boyle argues that those principles should not be seen ‘as binding obligations that must be complied with, but as principles, considerations or objectives to be taken account of—they may be soft, but they are still law’.<sup>992</sup> It is true that like many other legal forms, soft law could be abused. In general, however, in the

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<sup>988</sup> D. Shelton, Law, Non-Law and the Problem of ‘Soft Law’, in D. Shelton (ed.), *Commitment and Compliance: the Role of Non-Binding Norms in the International Legal System* (OUP, Oxford 2000) 10.

<sup>989</sup> Dina Shelton in international law by Evans p.141

<sup>990</sup> A. E. Boyle. *Supra* 994..p. 904

<sup>991</sup> A. E. Boyle. *Supra* 994... P.907. he referred to article 3 of the convention and explained that ‘Given their explicit role as guidance and their explicitly softer formulation, the ‘principles’ in Article 3 are not necessarily binding rules which must be complied with or which entail responsibility for breach if not complied with; yet, despite all these limitations they are not legally irrelevant. At the very least Article 3 is relevant to interpretation and implementation of the Convention as well as creating expectations concerning matters which must be taken into account in good faith in the negotiation of further instruments.’

<sup>992</sup> A. E. Boyle. *Supra* 994. p.908.

process of international law-making it has proved to be more helpful than 'objectionable'; it is simply 'another tool in the professional lawyer's armory'.<sup>993</sup> Moreover, they could provide evidence of existing law, or even determine state practice and *opinio juris* that eventually leads to new customary law.<sup>994</sup> Rosalyn Higgins, in the context of UN general assembly resolution, said that:

The passing of binding decisions is not the only way in which the law development occurs. Legal consequences can also flow from acts which are not, in the formal sense 'binding'.<sup>995</sup>

Some scholars even consider soft law to be a more appropriate avenue for law making in some cases, due to their flexibility and effectiveness in addressing common problems. To achieve this, they do not need to influence conduct in the desired manner<sup>996</sup>:

New rules of customary law are not necessarily appropriate to the elaboration of general principles and could not be created quickly enough; moreover, a treaty endorsing the precautionary principle or SD would only bind the parties. A binding resolution of the UN Security Council may be possible option, but only where questions of international peace and security are at stake. Thus, the consensus endorsement by states of a general principle enshrined in a soft law declaration is an entirely sensible solution to such law-making challenges.<sup>997</sup>

The status of precautionary principle was studied in chapter three, which found that although it is gaining more importance in the customary norms of international law, from a legal point of view, it is soft law, and therefore is not binding. While one should bear in mind that its legal significance and potential effects should not be 'taken for granted' since it is lacking a binding force, it should also not be 'dismissed' simply for not being binding.<sup>998</sup> This nonbinding character has not diminished the value, legal effect and 'potential universality' of the principle. Instead, being soft law, it creates a favourable condition for international support. Its status does not diminish its applicability, and in fact enhances its universality and its significant legal impact. For instance, the ICJ's decision in *Gabcikovo* references sustainable development. This shows that, although the concept is not a legally binding obligation, it represents a policy goal or a principle that can impact the outcome of a dispute. Consequently, the behavior of

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<sup>993</sup> *Id.*

<sup>994</sup> Alan Boyle, 'Soft Law in International Law-Making', in *International Law*, ed. by Malcolm Evans (Oxford University Press, 2010), pp. 122–40 (p. 122).

<sup>995</sup> Higgins 1995. P.24

<sup>996</sup> Dinah Shelton, 'International Law and 'Relative Normativity'', in *International Law*, ed. by Malcolm Evans (Oxford University Press, 2010), pp. 122–40 (p. 169)

<sup>997</sup> Alan Boyle, 2010. p.122.

<sup>998</sup> Mauro Barelli, 'The Role Of Soft Law In The International Legal System: The Case Of The United Nations Declaration On The Rights Of Indigenous Peoples', *International and Comparative Law Quarterly*, 58 (2009), 957 (p. 959).

the state and international organizations can promote significant changes in existing law.

<sup>999</sup> Moreover, the principle represents a policy goal that can influence the outcome of litigation and the behaviour of states and organisations.<sup>1000</sup> This approach provides a close analogy to explain the precautionary principle as a soft law instrument that could influence the decision of investment tribunals. It could also influence the expectations of foreign investors and the behaviour of host states.

### 5.2.2.3 (iii) *Applicability*

Article 31.3.c also requires the external rule to be applicable between the parties. The crucial question is whether it requires the parties in the dispute to also be parties to the external treaty that is being relied upon for interpretation.<sup>1001</sup> Compared to other elements, there is less of a consensus amongst scholars and tribunals on this

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<sup>999</sup> A. Boyle and C. Chinkin, *The Making of International Law* (OUP, Oxford 2007) 222.

<sup>1000</sup> Alan Boyle, *supra* 997, p. 134. 'SD can properly claim a normative status as an element of the process of judicial reasoning. It is a meta principle, acting upon other rules and principles- a legal concept exercising a kind of interstitial normativity, pushing an pulling the boundaries of true primary norms when they threaten to overlap or conflict with each other....if the SD is not in the nature of a legal obligation it does represent a policy goal or principle that can influence the outcome of litigation and the practice of states and international organizations and it may lead to significant changes and developments in the existing law. In that important sense, international law appears to require states and international bodies to take account of the objective of sustainable development and to establish appropriate process for doing so.'

<sup>1001</sup> Fragmentation Report, *supra* note 18, ¶ 470; see also GARDINER, *supra* note 23, at 265 (Gardiner feels compelled to emphasize that here, unlike the other elements of VCLT 31(3)(c), there is no hope to resolve the ambiguity in this particular element through textual analysis); Simma & Kill, *supra* note 20, at 696. Simma and Kill suggest that the notion of 'applicable' actually entails three distinct sub-issues. Beyond the question of 'which parties,' the term raises the issue of intertemporality—when must the rules be applicable, at the conclusion of the treaty or at the time of application/interpretation? *Id.* at 696. And finally, the meaning of applicable 'as a legal term of art'—does applicable mean 'in force' or 'binding,' or something more flexible? *Id.* at 697. I leave these two sub-categories out of the main analysis, here, for distinct reasons. First, as to intertemporality, the issue has basically ceased to be controversial. As Simma and Kill themselves recognize, most international courts and tribunals, as well as commentators, today recognize the possibility that VCLT 31(3)(c) envisions the possibility of considering developments in international law in the interpretation and reinterpretation of a treaty. *Id.* at 696. It may have been generally accepted that treaties were generally static before the conclusion of the Vienna Convention. See Gerald Fitzmaurice, *The Law and Procedure of the International Court of Justice: General Principles and Sources of Law*, 30 BRIT. Y.B. INT'L L. 1, 5 (1953). However since 1969 the presumption has clearly shifted, replaced by the notion that the parties' intent, as reflected in the terminology employed or the treaty's object and purpose, should control the issue of whether a treaty is susceptible of evolutive interpretation. See most recently, the practice of the ICJ in the last two years, for example, *Pulp Mills on the River Uruguay (Arg. v. Uru.)*, Judgment, 2010 I.C.J. 1, ¶ 145, 171–74 (Apr. 20). While I leave out the issue of intertemporality because it simply appears no longer controversial, I omit the issue of applicability because the analysis would be redundant. Simma and Kill note that on a purely textual basis the term may imply more flexibility than 'in force' or 'binding.' Simma & Kill, *supra* note 20, at 697–98. Note, however, that they advocate caution, insisting that their comments 'should not be taken as a basis for a liberal doctrine of 'applicability' under Article 31(3)(c) without further research.' *Id.* at 698. Nevertheless, problematizing 'applicability' in this way appears to introduce exactly the same ambiguity as arises in the interpretation of 'rules'—i.e. is the term flexible enough to include norms of a softer nature? Rather than repeat the analysis for each term, suffice it to say that VCLT 31(3)(c) appears to include several terms that could, if interpreted flexibly, permit consideration of soft-law.

requirement.<sup>1002</sup> Simma and Kill noted that authors who limit the scope of the article failed to address the issue of applicability:

On a purely textual analysis, the use of the term ‘applicable’ would seem to allow for more flexibility than would ‘in force’ or ‘binding’. This analysis lends support to the view that a rule can be considered under Article 31(3)(c) if it is ‘at least implicitly accepted or tolerated’ by the parties to the treaty being interpreted.<sup>1003</sup>

Again, in this example the ECHR found a way to adopt an even broader approach than those intended in scholarly debates. In *Demir & Baykara v. Turkey*, the Court decided not to differentiate ‘between sources of law according to whether or not they have been signed or ratified by the respondent State’. Instead, it defined its task under the treaty interpretation rules to be ‘searching for common ground among the norms of international law’.<sup>1004</sup> The Court noted that it is not necessary for the parties to the dispute to also be parties to the external instrument that is applied, nor is it necessary for the respondent state ‘to have ratified the entire collection of instruments that are applicable’.<sup>1005</sup> This liberal approach towards article 31.3.c allows a wider range of tools to inform the interpretation of the disputed treaty, even if it is not ratified by the responding state. The Court asserted that:

It will be sufficient for the Court that the relevant international instruments denote a continuous evolution in the norms and principles applied in international law or in the domestic law of the majority of member States of the Council of Europe and show, in a precise area, that there is common ground in modern societies.<sup>1006</sup>

An analysis of the principle of systemic integration and its elements shows that it is possible to justify recourse to the non-binding normative environment of a treaty by virtue of article 31.3.c. Can this evidence be extrapolated to the interpretation of investment treaties, and, in particular, to the interpretation of fair and equitable treatment or indirect expropriation, when taking into account the precautionary principle? A positive answer to this question would be consistent with the concept that, where appropriate, rules not strictly related to the treaty in question should be included

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<sup>1002</sup> McLachlan provided four possible solutions to the inconsistencies: a) Require all parties to the disputed treaty to also be parties to the external treaty; b) Permit reference to an external treaty if the parties to the disputed treaty are also parties to said external treaty; c) Require a finding that the parties to the disputed treaty do not match the external treaty, and that the external rule being relied upon, is a customary rule of international law; d) Require that the external rule be ‘implicitly accepted or tolerated’ by all parties to the disputed treaty, if there was an absence of complete identity between the disputed and external treaties Campbell McLachlan, ‘The Principle of Systemic Integration and Article 31(3)(C) of the Vienna Convention’, *International and Comparative Law Quarterly*, 54 (2005), 279–320 (pp. 314–15).

<sup>1003</sup> Simma and Kill, pp. 696–8.

<sup>1004</sup> *Demir & Baykara v. Turkey*, App. No. 34503/97, 48 Eur. H.R. Rep. 54, para. 78 (2008).

<sup>1005</sup> *Id.*

<sup>1006</sup> *Id.*

in judicial decisions, giving due regard to the normative environment of a treaty.

According to the orthodox approach, tribunals could look at each case to see whether the parties of the treaty are also party to any convention that includes precautionary principle. Since there are more than 3000 BITs, this would allow tribunals to see if the principle is applicable between the parties. For instance in the case of *Bilcon Delaware v. Canada*, the claimant is American, which is known to be the persistent objector of the precautionary principle. In this case, the tribunal might say that although Canada has vastly applied the principle, the United States not recognising its existence would prevent the tribunal from applying it when interpreting the treaty provision. However, under the same approach one might argue that the investors are party to the dispute, and that because the principle has been recognised by the investor (by accepting the guideline for conducting EIA or as the common industry practice), it could be constituted as applicable between the parties.<sup>1007</sup>

The broader approach adopted by the ECHR, which does not require ratification of the external instrument could also be used in order to justify the application of precautionary principle. The approach suggested by Simma and Kill to allow the principle if it is ‘implicitly accepted or tolerated’ by the parties to the treaty, could also be used. As mentioned before, this matter is purely case specific, and requires the tribunals’ analysis on each case. Nevertheless, the evidence taken from case law of the ECHR can, perhaps, not be directly extrapolated to the interpretation of investment treaties. That the ECHR uses article 31.3.c does not always mean that this article can be relied on under other treaties, so as to interpret those treaties in accordance with non-binding norms. Gardiner, for instance, suggested that the broad potential attributed by the ECHR to article 31.3.c of the VCLT is not to be taken as something that applies automatically to treaties in general.<sup>1008</sup>

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<sup>1007</sup> International Council for Mining and Metals (ICMM), which is a CEO- Led organization to improve sustainable development performance in the mining and metals industry. It currently accommodates 23 mining and metals companies as well as 35 national and regional mining associations and global commodity associations to address core sustainable development challenges. It has committed member companies to implement and measure their performance against 10 sustainable development principles. In most of the specific guidelines, precautionary principle was considered as a tool to achieve one of these principles: 2005 Reporting against the ICMM Sustainable Development Principles; good practice guidance for mining and biodiversity; 2014 Materials’ Stewardship.

<sup>1008</sup> Gardiner, *supra* 1008, at p. XXV. See also Hugh Thirlway, ‘The Law and Procedure of the International Court of Justice 1960–1989 SUPPLEMENT, 2010: PARTS NINE AND TEN’, *British Yearbook of International Law*, 81.1 (2011), 13–170 (p. 58). Mark Eugen Villiger, *Commentary on the 1969 Vienna Convention on the Law of Treaties* (BRILL, 2009), p. 433., concludes that ‘the term ‘applicable’ leaves no room

Nevertheless, the evidence of a legitimate recourse to external, non-binding norms on the basis of article 31.3.c can supply investment tribunals with a possible method of justification when facing environmental measures that were adopted to prevent a potential threat. If the interpretation, according to the object and purpose, does not offer an appropriate method for reliance on the precautionary principle, article 31.3.c at least provides an opportunity to take into account the environmental concerns of the host state.

### *Due diligence*

In addition to a relevant rule of international law, investment tribunals could also apply the precautionary principle as an inherent part of a state's due diligence to protect the environment. Due diligence (or sufficient diligence) is a concept developed under international case law, and is the diligence expected from a government mindful of its international obligations. Simply put, it is an expectation of a good government.<sup>1009</sup> Under this obligation, 'all states are under a duty' within their jurisdiction, to use their powers in such a way as to 'ensure suitable protection of rights of other states and their nationals.'<sup>1010</sup> It is a basic rule under international law, and has been used for a long time as the ideal scope for its application in the context of environmental protection.<sup>1011</sup>

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for doubt: *non-binding* rules cannot be relied upon'; The main argument here is that the ECHR has the character of a constitution which gives effect to moral standards. These standards require a flexible approach to treaty interpretation in order to protect them under varying circumstances. Therefore, the ECHR opens the door to a more far-reaching approach to treaty interpretation than would be possible under treaties that are reciprocal in nature; Thomas Barkhuysen and others, *The Execution of Strasbourg and Geneva Human Rights Decisions in the National Legal Order* (Martinus Nijhoff Publishers, 1999), pp. 834–35.

<sup>1009</sup> Pierre-Marie Dupuy, 'Due Diligence in the International Law of Liability', in *Legal Aspects of Transfrontier Pollution*, ed. by OECD (Paris, France: OECD Publishing, 1977), p. 369. Dupuy 1977, *zotero*, p.369.; first definition was given by the tribunal in the Alabama Case: 'under this rule governments are required: first, to use due diligence to prevent the fitting out, arming, or equipping, within its jurisdiction, of any vessel which it has reasonable ground to believe is intended to cruise or to carry on war against a power with which it is at peace; Secondly, not to permit or suffer either belligerent to make use of its own ports and waters as the base of naval operations against the other; Thirdly, to exercise due diligence in its own ports and waters and, as to all persons within its jurisdiction, to prevent any violation of the foregoing obligation and duties.' *Alabama claims of the United States of America against Great Britain*, Award 14 September 1872, tribunal of arbitration established by Article I of the Treaty of Washington of 8 May 1871. (quoted in OECD *zotero* p. 373).; also in Island of Palmas Case 'traditional sovereignty involves the exclusive right to display the activities of a state. This right has a corollary a duty: the obligation to protect within the territory the rights of other states, in particular their right to integrity and inviolability in peace and in war, together with the rights which each state may claim for its nationals in foreign territory.' Island of Palmas Case (or Miangas), United States v Netherlands, Award, (1928) II RIAA 829, ICGJ 392 (PCA 1928), 4th April 1928, Permanent Court of Arbitration [PCA], 839.

<sup>1010</sup> OECD, *Legal Aspects of Transfrontier Pollution* (Paris, France: OECD Publishing, 1977), p. 382.

<sup>1011</sup> Dupuy 1977, *supra* 1009, p.369.

<sup>1011</sup> OECD 1977, *supra* 1017, p.382



In general, every 'wrongful act by a state' gives rise to international responsibility.<sup>1012</sup> It applies both to positive acts by states contrary to an international obligation, and also an omissions to act as required by international law.<sup>1013</sup> The use of due diligence only concerns the latter however, namely unlawful omission by states.<sup>1014</sup> It becomes relevant when the 'passive or insufficiently active' behaviour of the state falls short of its obligation 'to act' imposed on it by the rules.<sup>1015</sup> Moreover, due diligence is an obligation of conduct, and is not enforceable.

International law is incapable of justifying a general duty to protect the environment however, which prevails over other interests. As an alternative, a series of very general rules with limited applicability have been adopted as principles; they are limited to obligation of conduct. These obligations are limited by due diligence rules, a typical obligation of protection.<sup>1016</sup> For instance, states have an obligation to prevent transboundary environmental harm, under which they have an international duty of diligence to ensure that they do not cause such harm. The general obligation of due diligence is not a strict requirement to produce a given result, and it varies greatly with the circumstances peculiar to each situation. Moreover, states have a responsibility to ensure an obligation, rather than a strict liability to take action. In addition, the operation of dangerous technologies imposes new responsibilities on states to exercise vigilance, irrespective of the extent of their general advantage for the development.<sup>1017</sup> As Pisillo-Mazzeschi states, 'The duty of prevention is not, of course, an absolute one. Whether the state has fulfilled its obligations in this regard is measured by the rule of due diligence'.<sup>1018</sup> Thus, 'it is a flexible test' that cannot be formulated in precise terms.<sup>1019</sup>

Dupuy and Vinuales considered 'due diligence' as a primary norm when elaborating states' responsibility towards environmental protection. They explained that many obligations arising from treaties 'must be interpreted in the broader context provided by

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<sup>1012</sup> Article 1 of the draft codification of the law of international responsibility, international law commission of the United Nations, ILC Yearbook, 1970, vol.2, p.199.

<sup>1013</sup> Dupuy 1977, supra 1030, p.369.

<sup>1014</sup> *Id.*

<sup>1015</sup> *Id.*

<sup>1016</sup> Tarcisio Hardman Reis, *Compensation for Environmental Damages under International Law: The Role of the International Judge* (Kluwer Law International, 2011), pp. 55–57. Reis, p. 55-7

<sup>1017</sup> Dupuy 1977, supra 1030, p.376.

<sup>1018</sup> Riccardo Pisillo-Mazzeschi, 'The Due Diligence Rule and the Nature of the International Responsibility of States', in *State Responsibility in International Law*, ed. by René Provost (Ashgate/Dartmouth, 2002), p. 44.

<sup>1019</sup> Riccardo Pisillo-Mazzeschi, 44

the duty of the due diligence'.<sup>1020</sup> This has recently received increasing attention in the literature and through jurisprudence. This increase in attention can also be seen from the number of international conventions, resolution and reports.<sup>1021</sup> However, It is not only prevention that has been recognised to be part of the obligation of due diligence. Recent decisions by ICJ on *Pulp Mills*, and also ITLO's advisory opinion, have demonstrated how the precautionary principle, as part of the obligation for due diligence, could be relevant for the interpretation of the actions of the states having environmental concerns. In other words, precautionary reasoning was applied through the wider obligation of due diligence.

The ILC<sup>1022</sup> and the Institute de International (IDI)<sup>1023</sup> have also contributed to this discourse when describing the states' responsibility to prevent environmental damages. The ILC in particular extensively explained due diligence under the commentary on the Article 3 on prevention, and described the obligation of due diligence for prevention of environmental harm as:

The degree of care in question is that expected of a good Government. It should possess a legal system and sufficient resources to maintain an adequate administrative apparatus to control and monitor the activities.<sup>1024</sup>

It is also acknowledged that the obligation is manifested by the reasonable efforts of a state to inform itself of the situation and 'take appropriate measures, in timely fashion to address those issues'.<sup>1025</sup> To adopt a reasonable and proportional measure it is suggested in the ILC Report that, to identify if the measure is ultra hazardous, states may look at:

Issues such as the size of the operation; its location, special climate conditions, materials used in the activity, and whether the conclusions drawn from the application

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<sup>1020</sup> Dupuy and Vinuales, pp. 256–257.s

<sup>1021</sup> For example, article 194, paragraph 1, of the United Nations Convention on the Law of the Sea; articles I and II and article VII, paragraph 2, of the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter; article 2 of the Vienna Convention for the Protection of the Ozone Layer; article 7, paragraph 5, of the Convention on the Regulation of Antarctic Mineral Resource Activities; article 2, paragraph 1, of the Convention on Environmental Impact Assessment in a Transboundary Context; and article 2, paragraph 1, of the Convention on the Protection and Use of Transboundary Water- courses and International Lakes.

<sup>1022</sup> Draft Articles on the Prevention of Transboundary Harm from Hazardous Activities, GA Res. 56/82, UN Doc. A/RES/56/82 (ILC Prevention Articles)

<sup>1023</sup> Institut de Droit international, Resolution on Environment, on 'Responsibility and Liability under International Law for Environmental Damage' adopted at the Strasbourg session 1997. 'When due diligence is utilized as a test for engaging responsibility it is appropriate that it be measured in accordance with objective standards relating to the conduct to be expected from a good government and detached from subjectivity. Generally accepted international rules and standards further provide an objective measurement for the due diligence test.'

<sup>1024</sup> (ILC Prevention Articles) commentary on Article 3, No. 17.

<sup>1025</sup> *Id.* No. 10.

of these factors in a specific case are reasonable, are among the factors to be considered in determining the due diligence requirement in each instance.<sup>1026</sup>

The Commission, referring to Principle 15 of the Rio Declaration, designated the element of precaution as part of a states responsibility to prevent significant harm. It stated that appropriate measures should be taken by way of ‘abundant caution’ even if ‘full scientific certainty does not exist, to avoid or prevent serious or irreversible damage’<sup>1027</sup>. It further defined the types of harms covered by stating that:

The degree of harm itself should be foreseeable and the State must know or should have known that the given activity has the risk of significant harm. The higher the degree of inadmissible harm, the greater would be the duty of care required to prevent it.<sup>1028</sup>

Referring to the *Rio Declaration*, the ILC Report explicitly mentioned the precautionary principle and its relevance to the duty of prevention in general commentary. Specifically it alleged that the precautionary principle ‘constitutes a very general rule of conduct of prudence’, which ‘implies the need for States to review their obligations of prevention in a continuous manner to keep abreast of the advances in scientific knowledge’.<sup>1029</sup>

The prevention of environmental harm, as a duty under due diligence, should be a ‘continuous effort’ and not a ‘one-time’ action. This reasoning could be applied when justifying whether a certain action by the host state violates investment provisions. The ILC further explains that as a duty, due diligence continues in respect of monitoring, as long as the hazardous activity continues. Furthermore, it will not be terminated after granting authorization for the activity.<sup>1030</sup>

In its advisory opinion, the ITLOS tribunal explicitly embraced the precautionary principle. It confirmed not only that the principle is applicable as a result of being part of the ISBA Nodules and Sulphides Regulation, but also as an ‘integral part of the general obligation of due diligence’.<sup>1031</sup> According to the tribunal, the obligation of due diligence comprises of three obligations: the obligation to adopt appropriate measures and ensure their enforcement,<sup>1032</sup> the obligation to conduct EIA,<sup>1033</sup> and the obligation to apply the precautionary principle. This applies not only under the applicable

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<sup>1026</sup> *Id.*

<sup>1027</sup> *Id.* No. 14.

<sup>1028</sup> *Id.* No. 18.

<sup>1029</sup> *Id.* No. 7.

<sup>1030</sup> *Id.* No. 2.

<sup>1031</sup> ITLOS Seabed Advisory Opinion, *supra* 776. para 131.

<sup>1032</sup> *Id.* Paras 115-1120. Referring to the interpretation by the ICJ in Pulp mills and also ILC project on prevention.

<sup>1033</sup> *Id.* Para 145

regulation, but also as part of the obligation of due diligence, and perhaps under customary international law.<sup>1034</sup> This obligation applies:

In situations where scientific evidence concerning the scope and potential negative impact of the activity in question is insufficient but where there are plausible indications of potential risks. A sponsoring State would not meet its obligation of due diligence if it disregarded those risks. Such disregard would amount to a failure to comply with the precautionary approach.<sup>1035</sup>

Besides strengthening the status of the precautionary principle in international law, this affirmation clarifies how an obligation of due diligence necessarily implies an obligation of precaution. Substantiating due diligence as a result of the precautionary principle could develop the procedural duties of precaution, the breach of which could trigger state responsibility.<sup>1036</sup> This could allow for further development in international environmental law. The limitations of such practices should be taken into account however, as it requires well defined and accepted standards.<sup>1037</sup>

Precaution and due diligence could mutually inform each other. By including the precautionary principle in the legal framework of due diligence, the former could expand and clarify the duties that are required from the state.<sup>1038</sup> If ascertained, this collaboration could introduce some certainty concerning the substance of the precautionary principle.<sup>1039</sup> The argument under this subsection is that, under customary international law, states have a duty of due diligence to prevent transboundary environmental harm.<sup>1040</sup> Furthermore, in environmental treaties where states have an obligation to protect certain aspect of the environment, such as biodiversity, climate change, waste disposal, etc., states are assumed to have a duty of diligence to ensure that the specific aspect of the environment is protected. A decision by the ITLOS tribunal recognised the precautionary principle as being relevant to (and embodied in) the state's

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<sup>1034</sup> *Id.* paras. 125-135.

<sup>1035</sup> *Id.* para 131.

<sup>1036</sup> Bénédicte Sage-Fuller, *The Precautionary Principle in Marine Environmental Law: With Special Reference to High Risk Vessels* (Abingdon, Oxon, United Kingdom: Routledge, 2013), p. 82.

<sup>1037</sup> *Id.*

<sup>1038</sup> *Id.*

<sup>1039</sup> *Id.*

<sup>1040</sup> The Court in the *Nuclear Weapons Advisory Opinion* confirmed that: 'the environment is under daily threat and that use of nuclear weapons could constitute a catastrophe for the environment. The Court also recognizes that the environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, including generations unborn. *The existence of the general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control is now a part of the corpus of international law relating to the environment. Legality of the Threat or Use of Nuclear Weapons*, Advisory Opinion, 1996 I.C.J. 226, paras. 29- 30 (emphasis added. The Court reaffirmed this statement in *Gabcikovo-Nagymaros Project* (Hungary. v. Slovakia.), 1997 I.C.J. 7, para. 53, and again in the case *Concerning Pulp Mills on the River Uruguay* (Argentina. v. Uruguay.), 2010 I.C.J. para. 193.

obligation of due diligence. It argued that, where applicable, investment tribunals could refer to the obligation of due diligence to interpret investment provisions according to the precautionary principle. For instance, when interpreting whether revoking an investor's construction licence for protection of the Leatherback Turtles is a violation of EET, a tribunal could take into account the state's obligation to protect that species. Furthermore, if the host state is a member of the *2001 Inter-American Convention for the Protection and Conservation of Sea Turtles*<sup>1041</sup>, and therefore has a duty to 'ensure protection of the sea turtles',<sup>1042</sup> according to the ITLOS and ICJ they have an obligation to ensure due diligence. In this instance the obligation is embodied in the duty to ensure that the species are protected from future harm.

Under the theoretical justification, the different avenues that would allow an investment tribunal to take into account elements of the precautionary principle also inform its interpretation of treaty provisions. This justification first examines interpretation in light of the evolved object and purpose of the investment treaty. Secondly, it interprets subjects in light of systemic integration (and other rules of international law). Although each route has its own limitation, and it is up to the tribunal to decide if a certain rule could assist its interpretation, this section has argued that the precautionary principle does not need to be binding, or applied in a normative way. On the contrary, the principle has the potential to integrate economic development with environmental protection by posing certain questions. This would establish a threshold, below which economic developments should not be interrupted. This would happen when a host state cannot establish through available knowledge, if the targeted activity is a potential threat. Almost every activity could have some potential environmental impact, and therefore could possibly be stopped; asking appropriate questions would rule out any risk that is neither serious nor irreversible. The appropriate questions will vary in each case, and it will be up to the tribunals to decide them.

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<sup>1041</sup> An intergovernmental treaty which provides the legal framework for countries in the American Continent to take actions in benefit of these species. Other instrument that requires protection of sea turtles include: *UN Convention on the Conservation of Migratory Species of Wild Animals (CMS or Bonn Convention)*, *Specially Protected Areas and Wildlife (SPAW) Protocol*, *Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region (Cartagena Convention)* (both *SPAW Protocol* and *Cartagena Convention* supported by the UNEP Caribbean Environmental Program.).

<sup>1042</sup> Articles X, IX, XII (4) and XVIII *2001 Inter-American Convention for the Protection and Conservation of Sea Turtles*: require parties to ensure protection, monitoring, compliance and also adopting measures to ensure protection.

### 5.3 Practical Justification

The importance of the precautionary principle and the ways by which tribunals could allow the principle to inform their interpretation were discussed under theoretical justification. This section has attempted to briefly explain why tribunals should consider this proposal to inform their decisions regarding external rules such as precautionary principle.

The first justification for allowing the application of the precautionary principle is that the constitutive instruments of investment tribunals mandate them to *apply the international law* and enable<sup>1043</sup> them to *determine* which rule of law (international or domestic) is the most appropriate. Examples of these instruments include the Claims Settlement Declaration of the Iran-U.S. Tribunal,<sup>1044</sup> NAFTA<sup>1045</sup>, ICSID<sup>1046</sup>, ECT<sup>1047</sup>, UNCITRAL Arbitration Rules<sup>1048</sup> and the Arbitration Rules of the Stockholm Chamber of Commerce.<sup>1049</sup> In several occasions,<sup>1050</sup> investment tribunals have referred to the nature of the claims in relation to international law.<sup>1051</sup>

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<sup>1043</sup> Y. Banifatemi, 'The Law Applicable in Investment Treaty Arbitration (Chapter 9)', in *Arbitration Under International Investment Agreements: A Guide to the Key Issues*, Katia Yannaca-Small (ed.), Oxford University Press, 2010. p. 204.

<sup>1044</sup> Iran-United States Claims Tribunal, article V of the Claims Settlement Declaration 'The Tribunal shall decide all cases on the basis of respect for law, applying such choice of law rules and principles of commercial and international law as the Tribunal determines to be applicable' And also article 33.1 of the rules of procedure 'The arbitral tribunal shall decide all cases on the basis of respect for law, applying such choice of law rules and principles of commercial and international law as the arbitral tribunal determines to be applicable'.

<sup>1045</sup> North American Free Trade Agreement, Dec. 8-14, 1992, 32 ILM 289 (1993), Article 102.2 'The Parties shall interpret and apply the provisions of this Agreement in the light of its objectives set out in paragraph 1 and in accordance with applicable rules of international law.'

<sup>1046</sup> ICSID article 42.1 'Tribunal shall decide a dispute in accordance with such rules of law as may be agreed by the parties. In the absence of such agreement, the Tribunal shall apply the law of the Contracting State party to the dispute (including its rules on the conflict of laws) and such rules of international law as may be applicable.'

<sup>1047</sup> Energy Charter Treaty, Dec. 17, 1994, 34 ILM 360 (1995). Article 27.3. g 'The tribunal shall decide the dispute in accordance with this Treaty and applicable rules and principles of international law'.

<sup>1048</sup> Article 33 of the UNCITRAL Arbitration Rules: 'The arbitral tribunal shall apply the law designated by the parties as applicable to the substance of the dispute. Failing such designation by the parties, the arbitral tribunal shall apply the law determined by the conflict of laws rules which it considers applicable.'

<sup>1049</sup> Article 22(1) of the Arbitration Rules of the Stockholm Chamber of Commerce: 'The Arbitral Tribunal shall decide the merits of the dispute on the basis of the law or rules of law agreed upon by the parties. In the absence of such agreement, the Arbitral Tribunal shall apply the law or rules of law which it considers to be most appropriate.'

<sup>1050</sup> 'the Tribunal's inquiry is governed by the [ICSID] Convention, by the [BIT] and by applicable international law.' *Siemens AG v. Argentine Republic*, award of Feb. 6, 2007, at para. 78.; That consent falls under the first sentence of Article 42(1) of the ICSID Convention. . . . The consent must also be deemed to comprise a choice for general international law, including customary international law, if and to the extent that it comes into play for interpreting and applying the provisions of the [BIT].'*ADC Affiliate Ltd. v. Republic of Hungary*, award of Oct. 2, 2006, at para. 290; '[t]his being a dispute under a BIT, the parties have agreed that the merits of the dispute will be decided in accordance with international law.' *MTD Equity Sdn Bhd v. Republic of Chile*, award of May 25, 2004, *supra* note 15, at para. 86.; 'the Tribunal's inquiry is

Investment law has been successfully integrated into public international law. In theory, it holds special features that keep debates about sources of international law alive and interesting.<sup>1052</sup> Investment law is, as portrayed by Tams, only a ‘snapshot’ of a much bigger body of international law and is constantly under readjustment.<sup>1053</sup> Since there is no unified code or legal source for investment law, the substantive investment law is built ‘BIT by BIT’. According to Tam, the *sources* of investment law are evolving, as is substantive investment law.<sup>1054</sup> This fact has been addressed in several investment disputes. For instance, in a dispute against Sri Lanka the tribunal specified that a BIT:

Is not a self-contained closed legal system limited to provide for substantive material rules of direct applicability, but it has to be envisaged within a wider juridical context in which rules from other sources are integrated through implied incorporation methods, or by direct reference to certain supplementary rules, whether of international law character or of domestic law nature.<sup>1055</sup>

In another instance, the tribunal in *MTD v. Chile* emphasised that it ‘had to apply international law as a whole to the claim, and not the provisions of the BIT in isolation’.<sup>1056</sup> By this statement, tribunal established its power and obligation to choose an applicable law.

The relevant sources of law applicable to the procedure of international courts and tribunals consist of the constitutive instrument of the relevant tribunal and the rule of procedure. In addition, customary international law, the general principles of law and the subsidiary sources of international law are also available. The treaty or agreement that is the basis of the claim often include gaps and ambiguities, so other sources of international law have been used to fill the gaps.<sup>1057</sup> Accordingly, arbitral tribunals play an important role in shaping investment law. Given the dominance of the treaties in

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governed by the ICSID Convention, by the BIT and by applicable international law,’ *Azurix Corp. v. Argentine Republic*, award of July 14, 2006, at para. 67.; *Generation Ukraine Inc. v. Ukraine* award of Sept. 1, 2003, , at para. 8.12 and *Champion Trading Co. v. Arab Republic of Egypt*, paras. 39-40; ‘whether there has been a breach of the BIT and whether there has been a breach of contract are different questions. Each of these claims will be determined by reference to its own proper or applicable law—in the case of the BIT, by international law’ *Cf. Vivendi Universal v. Argentine Republic*, ad hoc committee decision of July 3, 2002, 6 ICSID, para.96.

<sup>1051</sup> Antonio Parra, ‘Applicable Law in Investor-State Arbitration’, in *Contemporary Issues in International Arbitration and Mediation: The Fordham Papers 2007*, Arthur W. Rovine (BRILL, 2008), p. 3.

<sup>1052</sup> Christian Tams, ‘Conclusion: The Sources of International Investment Law: Concluding Thoughts’, in *International Investment Law: The Sources of Rights and Obligations*, ed. by Tarcisio Gazzini and Eric De Brabandere (Martinus Nijhoff, 2012), pp. 319–31 (p. 332).

<sup>1053</sup> *Id.* P. 327.

<sup>1054</sup> *Id.* P. 328

<sup>1055</sup> *Asian Agricultural Products Ltd (‘AAPL’) v Republic of Sri Lanka (Award)* (ICSID, 1990, El-Kosheri P, Goldman & Asante) 4 ICSID Rep 247

<sup>1056</sup> *MTD award*, supra 45.

<sup>1057</sup> C. Brown, ‘The Inherent Powers of International Courts and Tribunals’, *British Yearbook of International Law*, 76.1 (2006), 195–244 (p. 205).

substantive investment law, Tam suggests that the interpretation of treaty provisions is key for tribunals in their role as agents of investment law development.<sup>1058</sup> As successful agents whose interpretation has been followed, tribunals have ‘clarified the scope of vaguely-worded standards of protection and determined the reach of their jurisdiction’<sup>1059</sup> by interpreting investment treaty provisions in a certain way. So far, they have not hesitated to fill the ‘law-making vacuum’.<sup>1060</sup>

The second justification for application of external rules to interpret the investment treaty provisions is the inherent power of the tribunals. Investment tribunals, like many public international arbitral tribunals, do not have full jurisdiction. The extent of their jurisdiction is instead granted to them by the parties. In the case of investment disputes therefore, the consent on the part of the host state is an investment treaty. This demarcates the extent of the issues that a tribunal is deemed to be competent to decide. This does not exclude the laws that a tribunal may apply to determining those issues, however.<sup>1061</sup>

While the customary international law and the general principles of law are considered as the classic sources of law, tribunals have also resorted to a more controversial source: namely the ‘inherent power’ of the tribunals. This is claimed to be an extra-statutory source; it has its origin in (but is not limited to) the practice of English courts.<sup>1062</sup> Although there is no consensus regarding the source of this power, it is suggested that it ‘lies in the necessity for international courts to fulfil their judicial functions’.<sup>1063</sup> Moreover, exercising this power provides a better view for the tribunals to ensure the fulfilment of their function, both directly and consequentially.<sup>1064</sup> Jacob followed the same line of argument by suggesting that:

Without such a power the court would have form but lack substance...the judicial basis of this jurisdiction is therefore the authority of the judiciary to uphold, to protect and to fulfill the judicial function of administering justice according to law in a regular, orderly and effective manner.<sup>1065</sup>

The investment tribunals, as an international tribunal, could exercise their inherent power to employ other sources of international law. In doing so, they could interpret

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<sup>1058</sup> Tams, *supra* 1059, p. 329.

<sup>1059</sup> *Id.* P. 326.

<sup>1060</sup> *Id.* P. 327.

<sup>1061</sup> McLachlan, p. 371.

<sup>1062</sup> Brown, 2005, p. 205.

<sup>1063</sup> Brown, 2005 p. 198.

<sup>1064</sup> Brown, 2005, p. 229.

<sup>1065</sup> IH Jacob, the inherent Jurisdiction of the Court, *Current Legal Problems*, 1970. P.28.



the treaty provisions when they are vague. This practice of relating inherent power to the ‘post-adjudication phase’<sup>1066</sup> has been applied by other tribunals. It is also suggested that ‘International courts might, through the careful exercise of such powers, better manage the complex challenges being posed to the administration of international justice’.<sup>1067</sup> Therefore, ‘functional justification’, as advocated by Brown, could provide an appropriate platform for the tribunal to operationalize the precautionary principle. This would allow them to interpret the vague provisions of the BITs, such as FET and expropriation.<sup>1068</sup>

#### 5.4 Case Evaluation

After preparing a theoretical basis for application of the precautionary principle according to the international law, the next step is to operationalize the principle. Two awards were used (*Chemtura vs. Canada* & *Bilcon Delaware vs. Canada*) to speculate on how different the outcome could have been had the tribunals applied the precautionary principle on these particular cases. This approach was then used to test the research statement.

The justification for selecting these two cases in particular is fourfold. Firstly they are recent disputes and reflect the current challenges in the field of environment-related investment case. Secondly, they are both against Canada, and are under NAFTA. Both also feature an American foreign investor, which on one hand demonstrates the inconsistency in practice and on the other hand provides a diverging view (although not on a same matter) based on the same policymaking and legal environment. Thirdly, the host state in both cases is a developed country, which highlights the changing pattern in the investor-state dispute settlement, and shows how the same powers who pioneered the investment protection mechanism are now the subject of its claims. Also, the fact that when a mature legal environment like Canada is exposed to such claims, less developed governments should be mindful of their exposures. Finally, this selection allows for application of the precautionary principle in both scenarios; in one example the host state wins and in the other it defeats the dispute. This approach explores whether the principle provides an objective tool, which is not simply to justify the environmental measure and a deferential method but rather provides the tribunal with a double-edged sword. In other words, does it allow them to ask the right questions and

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<sup>1066</sup> Brown, 2005, p. 219.

<sup>1067</sup> Brown, 2005, p. 244.

<sup>1068</sup> Brown, 2005, p. 229.

analyse if a measure was genuinely adopted to protect the environment, or whether it was arbitrary and hostile in a way that constitutes breach of treaty obligation? Moreover, one pending case (*Vattenfall vs. Germany*) will be examined to speculate on possible outcomes if the tribunal apply the principle, and to compare it with a scenario that does not feature its application.

In order to apply the precautionary principle, the precautionary test that was introduced through the analytical framework of this study (chapter three and four), will be used.

What is the chosen level by the tribunal to review the measure adopted by the host state? Would the tribunal defer to the capability of the experts and decision makers or it decides to conduct a limited (as apposed to de novo) review to determine whether host state had acted according to the obligations that it accepted under the relevant investment agreement.

Did the host state have reasonable grounds for concern? How probable is the occurrence of the feared threat? What is the gravity of harm had the threat materialised?

What is the degree of the potential adverse effect by taking into account the geography of the project, the length of the harmful activity, cumulative effect, the existence of international standards or obligations, fatal effects? How the measure was communicated to the investor? Was the investor aware of the legal environment and the review process?

Was the adopted measure effective and proportional to the threat of potential harm?

#### **5.4.1 Chemtura v. Canada**

The Canadian government was successful in fighting off a Chapter 11 claim by the United States chemical manufacturer, Chemtura Corporation. The company contended that Canada's ban on the use of the chemical lindane as a pesticide impaired its investment, and claimed approximately \$79 million in damages. The tribunal denied Chemtura's expropriation claim under Article 1110, applying the 'substantial deprivation test'. It also rejected the breach of FET under Article 1105. In short, the NAFTA tribunal found that the lengthy regulatory process and related decision were acceptable; and considering the worldwide treatment of Lindane, Canada was well within reason to ban its use as a pesticide. Therefore, investment obligations were not violated.

#### *Standard Of Review*

The tribunal acknowledged the fact that its job is not to ‘second-guess the correctness’ of the scientific decision-making on whether Lindane was in fact dangerous.<sup>1069</sup> This point was also argued by the respondent. Nevertheless, in making this statement the tribunal did not attempt to grant complete deference, and therefore did not validate whatever the measure dictated. Instead it examined the review and the whole process to determine if there was an evidence of ‘bad faith’ or ‘disingenuous’ conduct on the part of the host state.<sup>1070</sup> This approach provides a reasonable authority for the tribunals to verify that they have done so in line with their obligation under the relevant investment agreement (here the NAFTA) by questioning the good faith and genuineness of their conduct. It also allows space for government authorities to decide on the level of protection within their territory.

*Reasonable Grounds for Concern*

According to the tribunal there was ‘*ample evidence* that the use of linden caused genuine concerns both in Canada and abroad’. This was taken as the basis and context, against which the argument by the claimant had to be assessed. The investor was deprived of a phase-out as a punitive measure.<sup>1071</sup> Once the tribunal had established the scope of its mandate, rather than second-guessing the correctness of the science-based decision-making process,<sup>1072</sup> it turned to the widespread concerns over the use of Lindane, stating that:

‘*Irrespective* of the state of science, however, the tribunal *cannot ignore* the fact that lindane has raised increasingly serious concerns both in other countries and at the international level since 1970s’.<sup>1073</sup>

Accordingly, the tribunal considered the measures to be enough to meet the criteria of reasonable concerns that the respondent was aiming to establish. It referred to the list of measures that other countries had adopted to restrict the use of Lindane, in addition to the relevant international instruments.<sup>1074</sup> The tribunal stated that:

‘This broader factual context is *relevant* in assessing...whether the special review was a result of a trade irritant’<sup>1075</sup>

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<sup>1069</sup> Chemtura award, supra 80, para 134.

<sup>1070</sup> *Id.* para. 138.

<sup>1071</sup> *Id.* para. 184. emphasis added.

<sup>1072</sup> *Id.* para. 134.

<sup>1073</sup> *Id.* para. 135 emphasis added.

<sup>1074</sup> *Id.* para. 136.

<sup>1075</sup> *Id.* para 137.

Thus, the tribunal established ‘reasonable grounds for concern’ by taking into account the motives and triggers of the measure, instead of its effect on the investor. It also cited the witness statement, which approved the international concerns to be the ‘reason’ that triggered the review<sup>1076</sup> as a response to domestic and international concerns.<sup>1077</sup>

This part of the award is of great importance from the point of precaution and the framework suggested in this thesis, since it clearly demonstrates that the tribunal’s adopted response to review the measure and actions of the host state was based on claims made by the investor. In other words, even though it examined the genuineness of the measure through the already internationally established concern, the tribunal did not presume the argument of a breach of FET. Instead, once reasonable concern was ascertained, the tribunal asked the claimant to prove that the respondent had acted in bad faith, beyond its mandate. In the end, it confirmed that, considering all the concerns that the respondent raised, the investment obligations had not been violated.

This reasoning by the tribunal suggests that if an investor claims that a review was conducted in bad faith, and not based on the state’s mandate and international obligations, ‘the burden of proving these facts rests on the claimant’.<sup>1078</sup> It emphasises the responsibility of the claimant by reminding them that the ‘the standard of proof for allegations of bad faith or disingenuous behaviour is a *demanding* one’.<sup>1079</sup> This is what the precautionary principle requires; reasonable grounds for concern over potential damages should trigger the action, not await conclusive scientific evidence.

*Degree of the Potential Adverse Effect (Significant/Serious/Irreversible)*

According to the explanation provided in chapter three, state practices and international instruments provide a threshold for taking precautionary action. This means that when there is a reasonable ground for concern the measure is triggered, but not all potential harms require the same treatment. In other words, measures should be taken if the potential harm is significant, and trivial adverse risks do not trigger precautionary measures. The Chemtura tribunal implicitly considered this threshold without referring to the principle. Although very subjective, the instrument and state practice provided

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<sup>1076</sup> *Id.* para 140.

<sup>1077</sup> *Id.* para 139-142.

<sup>1078</sup> *Id.* para 137.

<sup>1079</sup> *Id.*; see also *Bayindir Insaat Turizm Ticaret Ve Sanayi AS v. Pakistan*, ICSID Case No. ARB/03/29, Award (Aug. 27, 2009), para 143.

several elements to determine the level of the harm. Examples could include geography, the length of the harmful activity, cumulative effect, the existence of international standards or obligations, fatal effects etc. For Chemtura, the tribunal recognised some of these elements, against which the level of the measure were evaluated.

Lindane was among the chemicals that have been banned around the world due to their ‘persistence in the environment, bio-concentration, and bio-magnification ‘ in various food chains.<sup>1080</sup> In a joint scientific report on Lindane, the World Health Organization (WHO) and Food and Agriculture Organization (FAO), indicated that it could ‘accumulate in human tissue and had the potential to cause nervous system damage, convulsions and in some cases, even death’<sup>1081</sup>. Moreover, the review showed that Lindane is a significant source of toxic waste.<sup>1082</sup> Even the EPA, the claimant’s home regulator, also approved the adverse effects of Lindane.<sup>1083</sup>

Another issue in the review was the occupational exposure risk related to Lindane.<sup>1084</sup> The Pest Management Regulatory agency (PMRA) had significant concerns regarding the adequacy of the exposure to workers during seed treatment and handling, which warranted suspension of the product.<sup>1085</sup> The panel stated in its re-evaluation that Lindane is ‘unacceptable’ for registration because it is ‘potentially carcinogenic and that available information raises concerns about its neurotoxic and endocrine modulation effects’. In addition, it was declared to be ‘a major source of widespread environmental pollution’, including ‘long range dispersal by air and water currents to the Arctic’.<sup>1086</sup>

To determine the legitimacy of the measure, the tribunal noted the witness statement. The witness at the time was the director of PMRA; he stated that the conduct of the special review was prompted by ‘commitments undertaken by Canada during the negotiation of the Aarhus Protocol’. In addition, the tribunal noted his statement regarding the pressure coming from other countries to ban Lindane, and acknowledged the need of the ban ‘because, of course, their use could contribute to long-range transboundary’ impacts. These would expose other countries that had banned it before.<sup>1087</sup> The tribunal referred to the *Aarhus protocol on POP* and the *1979 Convention on*

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<sup>1080</sup> *Id.* Canada counter-memorial, para. 27.

<sup>1081</sup> *Id.* para. 28.

<sup>1082</sup> *Id.* para. 32.

<sup>1083</sup> *Id.* para. 29.

<sup>1084</sup> *Id.* para. 50-53.

<sup>1085</sup> *Id.* para. 30.

<sup>1086</sup> *Id.* Canada rejoinder memorial, para 67.

<sup>1087</sup> *Id.* para.139.

*the Long-Range Transboundary Air Pollution* (LRTAP convention a UN program), which restricted the use of Lindane, and reassessed its safety.<sup>1088</sup> It also referred to the *Stockholm Convention on the Persistent Organic Pollutants*, under which Lindane was listed as one of the chemicals to be eliminated.<sup>1089</sup>

#### *Communication (Due Process)*

To find out whether the authorities had complied with their obligation of due process, the tribunal asked the witnesses if the investor was treated properly. It concluded that the communication was ‘sufficient to satisfy the standard of treatment required by article 1105 NAFTA’.<sup>1090</sup> It also took into account that after the claimant had challenged the decision of the panel, a board of review was appointed.<sup>1091</sup> This was considered as evidence that the claimant had received fair treatment.<sup>1092</sup> Moreover, it observed that as a sophisticated registrant, experienced in a highly regulated industry, the claimant could not reasonably ignore the practice and the importance of the evaluation of exposure risks within such practice. To support this, the tribunal quoted the witness statement regarding the familiarity of the claimant with PMRA re-evaluation policy to determine if the host state had breached the due process requirement.

Looking at the way the tribunal highlighted the facts and background to the case demonstrates the approach that the tribunal had adopted. For instance, the tribunal stated that ‘as a result of the risks associated with the use of Lindane, many steps have been taken to restrict the use of Lindane on an international level in the last decades’.<sup>1093</sup> The tribunal also highlighted that the main objective of the responsible agency was to review the chemical to ‘prevent unacceptable risks to people and the environment from the use of pest control products’.<sup>1094</sup> Only after all of these enquiries did the tribunal announce that the risk assessment findings warranted regulatory function.<sup>1095</sup>

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<sup>1088</sup> *Id.* para. 135.

<sup>1089</sup> *Id.* para. 136.

<sup>1090</sup> *Id.* para. 182 and 192.

<sup>1091</sup> *Id.* Canada rejoinder memorial para 64: ‘Bord of review among other things suggested that the panel take into account of all mitigation measures proposed by the claimant and the panel engaged in a de novo review of the lindane with a new team of scientists, with one exception.’

<sup>1092</sup> *Id.* para. Canada rejoinder memorial, Para 57

<sup>1093</sup> *Id.* Canada rejoinder memorial, para. 8.

<sup>1094</sup> *Id.* para. 10.

<sup>1095</sup> *Id.* para. 29

*Type of measure (proportionality and effectiveness)*

The next questions for the tribunal concerned the type of the measure adopted by the tribunal, whether it was a proportionate response and whether it was effective. This analysis concluded that the measure was in fact a valid precaution, and thus not a breach of FET or expropriatory. Sensitive and more objective questions were posed here to determine if the measure was proportional, instead of posing the question in the beginning and out of context.

The disputed measure was the cancellation of the claimant's registration. The tribunal recognised the measure to be legitimate, and did not raise the question of proportionality, supposedly because other elements were clear and convincing enough that no other test was required. However, to conclude its decision, the tribunal considered the context, motive and reasons behind taking the measure, instead of merely analysing how the measure impacted the claimant's business. The tribunal started its decision by taking into account all the circumstances.<sup>1096</sup> Therefore, tribunal reassessed the cancellation of the registration as a result of compliance with international obligation. Tribunal found that the chemical posed serious adverse impacts on health and the environment, and therefore ruled that the cancellation was not a breach of fair and equitable treatment, and was within the police power of the host state.

#### **5.4.2 Bilcon Delaware v. Canada**

Bilcon Delaware, proposed a mining investment in Nova Scotia, Canada. The initial proposal was for 3.9 hectares quarry being built in area of 152-hectare land. A conditional permit for quarry was granted for the 3.9 hectares. However, after the permit was granted, it became clear that the investor intended to expand the quarry from 3.9 to 124 hectares over 50 years. According to federal laws, a Joint Review Panel (JRP) should assess any mining proposal larger than 4 hectares. This should consist of federal and relevant provincial authorities evaluating the project, which should identify the remaining adverse impacts after the mitigation measures, were adopted.

The panel had the discretion to ask for further information in its mandate, and also asked for a letter referring the proposal to the JRP. Accordingly, the panel amended the guideline after consulting the community and recognizing their concerns. It then asked the investor to address the issues in its EIS, to which the investor did not object.

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<sup>1096</sup> *Id.* para. 123.

However, after the evaluation of the EIS conducted by the investor, the panel concluded that the adverse impacts of the project were so serious that they could not be mitigated. As a result, they recommended that the proposal should be rejected. The authorities therefore rejected the project. The investor then filed a dispute under NAFTA arbitration facilities, claiming that the actions of the panel and the authorities were in breach of NAFTA provisions, namely FET and National Treatment.

The tribunal concluded, *inter alia*, that investors had an expectation to be treated according to Canadian laws, that the JPR report had adopted the concept of 'community core value' without prior notice, that the concept was not included in the law, and that the panel had exceeded its mandate by making a decision instead of identifying the adverse effects of the project after mitigation. The tribunal found that all of these measures resulted in a breach of the duty of FET; they were arbitrary, lacked due process and did not fulfil the expectation of the claimant.

#### *Standard Of Review*

Theoretically, the tribunal recognised the regulatory power of the host state, and acknowledged that economic development and environmental integrity are not necessarily conflicting and can be mutually reinforcing.<sup>1097</sup> It also emphasised the discretion of the host state in several instances. Tribunal stressed that states are free under NAFTA to determine the level of protection and high environmental standards.<sup>1098</sup> Even if the laws in place at the time of investment require a project to be approved by a public referendum, this is not against NAFTA provisions.<sup>1099</sup>

The tribunal therefore explicitly stated that it was not conducting its own environmental assessment in substitution for that of the review panel. They asserted that their standard of review would be to examine if the measure had been consistent with the laws of Canada in place at the time of investment, 'including the core evaluative standard under the CEAA and the standards of fair notice required by Canadian public administrative law'.<sup>1100</sup> The tribunal went further by declaring that states are allowed by law to assign a mandate to evaluate the project in any institution.<sup>1101</sup> More importantly, the tribunal recognised the margin of appreciation by stating that:

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<sup>1097</sup> Bilcon award, *supra* 255, para. 597.

<sup>1098</sup> *Id.* para. 598.

<sup>1099</sup> *Id.* para. 599.

<sup>1100</sup> *Id.* para. 602.

<sup>1101</sup> *Id.* para. 738.



‘Errors, even substantial errors, in applying national laws do not generally, let alone automatically, rise to the level of international responsibility vis-à-vis foreign investors. The trigger for international responsibility in this particular case was the very specific set of facts that were presented, tested and established through an extensive litigation process’.<sup>1102</sup>

Although it made several statements that its job was not to second-guess the actions of the states, and realized a wide margin of appreciation for the state of Canada in its award, the tribunal seemed to be relying on the statement made by the claimant, instead of investigating the JRP report to find the breach of obligations. For instance, the main claim in the dispute was the concept of ‘community core value’, which was allegedly made up by the panel; there was no such thing in Canadian law. Therefore, the tribunal took the claim at face value, instead of looking at the whole circumstances, or at least the review report, and attempted to interpret the meaning of the concept completely out of context. Therefore, it made an assumption about the interpretations that the JPR might have meant, instead of looking at the context in which the word was used.<sup>1103</sup> When writing the report the tribunal then concluded that none of the interpretations where acceptable as an excuse to use the approach in question.<sup>1104</sup> The tribunal could have easily understood what the community core value meant by looking at the comprehensive amended guideline, which was provided by the JPR after consulting with the local community and identifying the concerns based on their mandate to include socio economic study. This would have explained to the tribunal the emphasis that the panel made on the community, why it was concluded, and also why the panel had recommended the rejection of the proposal. This factor alone, to a certain extent, could have changed the way the tribunal looked at the report and the measure.

*Reasonable Grounds for Concern:*

The next question that could have been asked was whether the host state, or the relevant authorities, had reasonable grounds for concern. The previous question on the standard of review was more general while the second question aims at applying the core elements of the precautionary principle.

Once the authorities realised that the project was designed to take 124 hectares and not 3.9 hectares, they informed the investor that under the federal law, the proposal should be assessed by a JPR. This would take into account the provincial regulations, as the

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<sup>1102</sup> *Id.* para. 738.

<sup>1103</sup> dissenting opinion by judge McRae.

<sup>1104</sup> *Id.*

proposal was enormously exceeding the tolerable volume of query (4 hectares). The authorities then sent for the fishing review and the JPR. After reviewing the proposal, the review panel consulted the community and recognised their concerns, within its mandate. The gravity and possibility of the potential harm were high enough for the panel to conclude that the adverse impacts were too serious, and therefore could not be alleviated via mitigating measures.

If the elements of the precautionary principle were to be applied, these concerns regarding the probability or gravity of the adverse effect could have been used to confirm reasonable concerns and trigger an action, in this case the rejection of the proposal. However, as the precautionary practice dictates, these concerns are necessary to trigger, but not enough to justify, precautionary action. Therefore the next question for the tribunal would have regarded the level of the adverse effects, since in practice not all potential harms can validate action; there has to be a degree of seriousness.

*Degree of the Potential Adverse Effect (Significant/Serious/Irreversible)*

The tribunal could have looked at the proposal for building the quarry, the JPR report and the public consultation result based on different criteria to determine if the potential harm was significant, serious or irreversible. This could have helped them to determine whether the concerns were valid, and whether the potential harm was serious enough to justify rejecting the project without requiring mitigation measures. Although deciding on the level of concerns is a very-case sensitive process, there are several indicators in international documents and state practice that can help to find an answer.

For instance, in terms of the *geography*, the potentially impacted area that was proposed included 152 hectares, 124 hectares of which was to be used for the quarry. As argued by the respondent in a very comprehensive defence for the breach of national treatment, compared to other mining projects in the region it encompassed a much larger area. This, combined with the proposed *length* of the project (50 years), could justify the worrying behaviour of the Panel. Another element, which was opposed by the investor as being irrelevant but which was explicitly part of the guideline was the *cumulative effect*. This was not addressed in the investor's EIS, despite being considered an important element to analyse the hidden adverse impacts of seemingly undamaging activities.

By looking into the documents provided by the respondent, and several references to the investor's proposal and its EIS, the tribunal could have easily assessed the severity of

the potential harm. Although this would have been a subjective approach, ticking all of the boxes it would have made it easier to decide whether it was a genuine measure, and would accordingly require both the claimant and the respondent to reflect on these issues.

*Communication (Due Process)*

The next step would have been for the authorities to communicate the measure and the action to the investor. The investor's answer would have determined to a certain extent whether the due process had been fulfilled. The Tribunal could then have looked into the mandate to find out any further measures available to them, other than recommending mitigating measures. Instead, they relied heavily on the claims made by the investor. Canada stated in several instances that the letter of referral to the JPR included the duty of the panel, and that it had the power to require further information. The panel did this in the form of a guideline, after consulting with the community. Accordingly, the final guideline emphasized the impact of the project on the community, and provided a detailed set of elements and principles to be taken into account.

*Type of measure (proportionality and effectiveness)*

The last question in this regard would have been to look into the measure itself. In this case the proposal for the investment was rejected, based on the EIS. The panel further suggested that a moratorium be put in place until studies had been conducted on the resilience of the particular location. This, in the opinion of the tribunal, was a zoning decision. The panel would then have decided the effectiveness and proportionality of the measure after considering all the elements.

The analysis above is not intended to predict the outcome, or to claim that if the tribunal had exercised the 'precautionary test' the result would have been different. It focuses instead on asking the right questions, and taking into account the *whole circumstances* surrounding the matter. Depending on the answers, the tribunal could still remain convinced that the measure was not justified, but the approach would have at least provided an objective test. Such a test could then have been considered by other NAFTA states, or other countries who might be taking environmental decisions, who were looking for the criteria that their legitimate decision-making would be assessed on.

### 5.4.3 Vattenfall v. Germany

A few months after the Fukushima disaster, Germany passed a number of laws aimed towards changing energy policy and deactivating the 11<sup>th</sup> amendment to the *Atomic Energy Act* (in which it extended the lifespan of the nuclear plants from eight to fourteen years). In 2011 the German Parliament decided to abandon the use of nuclear energy by the year 2022.<sup>1105</sup> Although the disaster was the main trigger for this nuclear phase-out, the debate over use of nuclear power in Germany had been going on long before. The disputed measure is the immediate closure of the oldest power plants, which have not been in use since 2007, and the gradual closure of other plants by 2020. The two nuclear power plants subject to this dispute were not operational at the time of the decision.<sup>1106</sup> The importance of the public opposition regarding the use of nuclear energy has also hardened Germany's nuclear stance.

As a result, Vattenfall filed an investor-state dispute under the ECT in 2012, claiming over €3.7 billion in compensation because of the nuclear phase out. According to Vattenfall's financial report for 2011, the damages from the nuclear phase out amounted to €1.5 billion in 2011 alone<sup>1107</sup>. This amount then increased due to additional costs for past and future losses and claims, reaching a number that has since been reported to be between \$4.6 billion (around €4.1), (half of Germany's development budget aid<sup>1108</sup>)<sup>1109</sup> and \$6 billion (around €5.3).<sup>1110</sup>

It is not possible to foresee at this stage what standard of review the relevant tribunal will adopt. However, if this case is not settled like the first Vattenfall case, and instead

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<sup>1105</sup> Nathalie Bernasconi- Osterwalder and Martin Dietrich Brauch, 'Background: Nuclear Phase-Out – Investment Treaties – Investor-State Arbitration – Investment Protection Standards', *International Institute for Sustainable Development*, 2013, p. 2 <<http://www.iisd.org/publications/state-play-vattenfall-v-germany-ii-leaving-german-public-dark>> [accessed 19 January 2015].; The Thirteenth Amendment to the Atomic Energy Act (13. AtGÄndG v. 31.07.2011, BGBl I S. 1704 (No. 43)) came into effect on August 6, 2011.

<sup>1106</sup> PowerShift (2012) Der deutsche Atomausstieg auf dem Prüfstand eines internationalen Investitionsschiedsgerichts? Hintergründe zum neuen Streitfall Vattenfall gegen Deutschland (II), October, quoted in: 'Legal vultures: Law firms driving demand for investment arbitration', Corporate Europe Observatory (CEO) November 2012, available at: <[http://corporateeurope.org/trade/2012/11/chapter-3-legal-vultures-law-firms-driving-demand-investment-arbitration#footnote86\\_726qt8p](http://corporateeurope.org/trade/2012/11/chapter-3-legal-vultures-law-firms-driving-demand-investment-arbitration#footnote86_726qt8p)>.

<sup>1107</sup> {Citation} Bernasconi- Osterwalder & Hoffmann, 2012.

<sup>1108</sup> German newspaper Die Zeit reports that the compensation claimed would be higher than €4 billion—half of Germany's annual development aid budget—and indicates that €2.2 million were earmarked in Germany's federal budget to cover legal expenses with the Vattenfall II proceedings in 2014 (Pinzler, Uchatius, & Kohlberg, 2014) quoted in: sconi- Osterwalder & Hoffmann, 2012

<sup>1109</sup> Swedes want €4.7 billion for nuclear shutdown, The Local, 15/10/2014, <http://www.thelocal.de/20141015/vattenfall--want-47-billion-for-german-nuclear-shutdown>.

<sup>1110</sup> Alexander Hellemans, Vattenfall Seeks \$6 Billion in Compensation for German Nuclear Phase-Out IEEE spectrum, 12/11/2014, <<http://spectrum.ieee.org/energywise/energy/nuclear/swedish-energy-giant-vattenfall-nets-billions-for-nuclear-phaseout>>.

reaches the merit phase, the tribunal could, by asking the right questions from the claimant and respondent, to use this opportunity to adopt a more objective approach towards the disputed measure to determine its genuineness. None of the party submissions or orders issued by the tribunal have been published on the website to date, nor have the parties to the dispute made them public. Perhaps a fresh look through the precautionary lens could be an opportunity for the tribunal to systematically take into consideration what needs to be asked when an environmental measure is disputed.

#### *Standard of review*

In selecting its method of review, the tribunal could choose to look at the *whole process* that caused a decision to be made. This includes reviewing the measure, the background, and the reports that pushed the authorities to adopt the measure. Background information and reports could include public consultation, scientific reports, and NGO reports, among other things. Essentially, authorities should be able to demonstrate a basis for *reasonable concerns* other than mere fear of nuclear disaster, even if the measure has been triggered by a disaster. They should be able to justify its genuineness before the investment tribunal. The tribunal should look into the background of the measure or ask the respondent to provide these documents, rather than moving straight to the effect of the measure on the investor. In this way, the tribunal would not only objectively evaluate the intention behind the measure, but would also send a signal to the state to move beyond the blanket defence of police power and prepare to justify their measure.

Firstly, according to the explanation of the precautionary principle in chapter three, the burden of proof will be on the investor for demonstrating the harmlessness *if* the host state can establish a reasonable ground for concern (one that it is not a trivial risk based on fear from what happened in Fukushima).

#### *Reasonable ground for Concern*

As mentioned previously, Germany had to prove that there was a reasonable concern to health and/or the environment, and that having a nuclear power plant would impose a risk. These concerns included, the age of the installation, the concerns of the public, and the impact of the power plants on the environment. In addition, supervision, no matter how strong, could not alleviate these concerns. Most of the government actions could be regarded as public policy, apart from corruption. Even the green party can promise certain measures to people genuinely, for though it has political motives, it still serves a

public interest. Nevertheless, by providing reasonable grounds for concern, tribunals would be able to look at the real reasons for said concern. They can ascertain if the measure is serving a mere political purpose, or if it is actually a concern about adverse impacts.

It is worth noting that some argue that the Fukushima disaster was preventable.<sup>1111</sup> Firstly, there was insufficient evidence of large tsunamis. Secondly, inadequate computer modeling led to the underestimation of the tsunami, as indicated by the report. Thirdly, the supervisory agency (NISA)<sup>1112</sup> failed to review the simulations conducted by the operating company. Considering what went wrong in Fukushima, Germany might need to go beyond the fear of having the same disaster in Germany, since according to expert reports, the nuclear plants in Fukushima did not follow the best practice regarding the estimation for tsunami that in Chile and later changed by the incident in France in xxx. Therefore, the loss was partly due to not taking signals seriously, whereas Europe is well within the best practice. Additionally, the blame was partly placed on the supervisory agency in Japan. If Germany wants to use the precautionary principle it has to fulfil the criteria, instead of relying on the blanket defense of ‘police power’.

#### *Potential adverse harm*

To determine the degree of potential harm, the tribunal could take into account: the background provided by the government, the geography that might be impacted, the length of the activity or the nuclear plans that might remain active according to the life expansion program. Furthermore, regarding international obligations, one might consider the European energy policy or the budget aid. All of these questions, in addition to the due process and proportionality and effectiveness that were discussed in previous cases, are extremely fact-sensitive, and depend highly on the submissions of both parties. Therefore, it would be difficult to speculate on possible defences in detail. However, the questions that were suggested as the framework for application of the ‘precautionary test’ could in any event objectively direct the tribunals. Consequently, this would also help the parties to know what their duty and rights are under the investment treaties that they have signed, in relation to environment-related matters.

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<sup>1111</sup>James m. Acton and Mark Hibbs, ‘Why Fukushima Was preventable’, Nuclear Policy, Carnegie Endowment for International Peace, March 2012. Available at: <<http://carnegieendowment.org/files/fukushima.pdf>>.

<sup>1112</sup>Nuclear Industrial Safety Agency.

## 5.5 Conclusion

This chapter aimed to operationalize the precautionary principle through three steps. The first section analysed article 31 VCLT on treaty interpretation and argued that tribunals could use the precautionary principle to interpret FET and regulatory expropriation. According to article 31.3.c, this would require the introduction of international law into the interpretation. They could also consider the evolving object and purpose of the investment treaties and apply the precautionary principle according to article 31.1, as the recent practice in environmental regulation. This is part of the objective of achieving sustainable development in modern investment law.

The second step discussed the empowerment of the tribunals to use international law. Additionally, soft law was taken into account as a modern source of international law when applying the precautionary principle. As such, the constitutive elements of the tribunals *enables* them to apply international law. The vague language of the investment treaties *necessitates* the tribunals to fill in the gaps, and the inherent power of the tribunals *qualifies* them to choose applicable law to apply to the facts of the dispute.

Finally, the practical segment of this thesis was to exemplify how the claimed ‘precautionary test’ could answer the question of this thesis. Namely, the question was: to what extent could the precautionary principle assist investment tribunals in making a balanced decision for environment-related investment disputes?

The simple answer to this question is that the precautionary principle, as it is, could equip the investment tribunal with a tool to ask the right questions. This, however, does not mean that this tool alone can address all issues in this area. Instead, it can direct the tribunal to ask the right questions, allowing it to comprehend in an objective way whether the disputed measure has been adopted for genuine environmental purposes. This is done in a systematic way that is based on a set of questions that are extracted from international instruments, state practice and jurisprudence.

This method could serve several objectives. Firstly, adopting an objective test could send a signal to the states to provide an answer to the questions in their defence. This would also let the investors know how to prepare their claim when they face an environmental measure. If properly applied, it could, bring predictability to the players, and as a result would bring consistency to the investment system.

Secondly, the precautionary principle is a double-edged sword that proved to be a balancing tool, as opposed to other methods such as the margin of appreciation and cost-benefit analysis. Furthermore, it specifically tests for environment-related cases, as

opposed to more general methods such as police power and proportionality. It tilts the balance in such a way that it could work as a blind test without bias towards any party. This is because it only considers the peculiarities of the environmental regulation and the ultimate goal of achieving Sustainable development by providing a benchmark. If the measure cannot stand the test, it is very likely that it could be constitute as a breach of investment treaty provision even if it is for genuine environmental purposes.

Finally, this test would allow the tribunal to play a more active role in dispute resolution, rather than deferring to the sovereign power of the states or protecting the rights of the investors. Several methods have been suggested to overcome the legitimacy crisis of the investment regime. These include establishing an appeal mechanism, renegotiating BITs and including some provisions for recognition of the public policies. Ultimately, however, tribunals hold the power to interpret these inevitably vague and broad provisions. Therefore, arming the tribunals with appropriate tools in each field could allow the system to overcome the panic regarding inconsistent decisions and unsatisfied stakeholders.

Once again the message of this thesis is not to claim that the PRECAUTIONARY PRINCIPLE is the *answer*, but rather that it is the right *question*.



## 6 Concluding remarks

Throughout the analysis of this thesis, the main goal was to provide a coherent and complete picture of the role of investment tribunals in accommodating environmental concerns into investment disputes. To better present the environmental elements in such disputes, this thesis focused on measures that had been adopted by host states due to fear of future harm to the environment. For this purpose, the precautionary principle was selected as a principle of international environmental law; it specifically provides a guideline for states to take action when protecting the environment from threats of harm. Therefore, the application of this principle permeated the analysis of this thesis.

Chapter two began with an introduction to the problem of inconsistency in the investor-state dispute settlement, particularly in those cases consisting of an environmental component. In addition, it signified the necessity to address environmental issues in a systematic way, and demonstrated the different approaches adopted by the tribunals. Specifically, it looked at how diverse interpretations of the treaty provisions (FET and regulatory expropriation in particular), and the treatment of the environmental motives behind disputed measures, can impinge on the outcome of disputes. For this reason, the relevant jurisprudence was taken into consideration. It was only through this approach that a true understanding of inconsistency in environment-related investment dispute settlement was made possible. The analysis of some of the most important jurisprudence revealed that, in general, three different approaches were adopted. The first approach consisted of decisions where environmental concerns were deemed irrelevant to justify a violation of investment treaty provisions. This type of attitude argued to be less likely to be adopted, as awareness towards sustainable development has improved, and there is less doubt over the importance of environmental protection. Nevertheless, the current predicament is: to what extent could environmental concerns influence a tribunal's reasoning when deciding upon investment treaty violation? Accordingly, the second type of approach concerned decisions where the importance of environmental concerns as the trigger behind the states' policies was acknowledged, but did not impact the interpretation of the investment provisions. This category has resulted in decisions in which environmental protection is praised and referred to, without having any impact in the final interpretation of investment treaty violation. In the last type, tribunals looked into

decisions where the tribunal took into account environmental elements and allowed these concerns to influence their interpretation of the investment treaty provisions. However, as much as the latter category has been essential in making a footprint to enable synergy between environmental concerns and investment protection, it was hard to extract a systemic and objective benchmark from these decisions. This made it difficult to demonstrate a pattern in environment-related investment disputes.

The second chapter concluded by providing a non-exhaustive list of elements that had seemingly persuaded tribunals to find violations in investment treaty provision. These elements included scientific proof, public opposition, investors' expectation from a state's environmental policies and so forth. It was also argued that tribunals should move beyond the mere acknowledgment of the importance of environmental protection, and should now consider these concerns in their interpretation of treaty standards. To achieve this goal, tribunals should take into account the peculiarities of environmental regulation, and the constant changes in monitoring mechanisms. This would enable them to adjust with changes and respond to the threats of environmental harm.

The issues in environment-related investment disputes using the precautionary principle cannot be addressed by merely identifying the principle's content within international environmental law. The background of its emergence as a mechanism for environmental protection is as important as its content and elements. Therefore, the first section of chapter three was devoted to an analysis of the issue of environmental regulation, and the difficulties of the early mechanisms of protection. The discussions on the peculiarities of environmental issues, and the limitation of science in addressing the issues, demonstrated the complexity of the matter. A mechanism was introduced as a result, which allowed states to act if they could establish that there was a serious or irreversible harm to the environment, without having to wait for science to become conclusive. Nonetheless, the debate on the precautionary principle revealed that there is disagreement among scholars with respect to its applicability and status, both under international law and in addressing environmental problems. Having mentioned the main criticisms, it was argued that the precautionary principle, according to the international environmental instruments, contains certain elements that could prove its applicability. Moreover, regarding the status of the principle, it was suggested that to fulfil its task (monitoring environmentally sensitive activities to prevent future harms), the

precautionary principle does not necessarily need to be a binding principle. It was argued that, being a soft law instrument under international law, the precautionary principle is capable of providing a guideline for decision makers and consequently the dispute settlement bodies when recognising the urge to prevent environmental harm. This conclusion was reinforced by explaining two functions of the principle, namely, procedural and substantive.

While the procedural function of the precautionary principle deals with the allocation of the burden of proof, the substantive role of the principle centres on interpretation. The interpretative capacity of the precautionary principle means it is able to inform the interpretation and evaluation of actions that have been allegedly adopted to prevent future environmental harm. This function was explored by analysing different dispute settlement institutions in which the application of the principle had been discussed. Therefore, the jurisprudence on the precautionary principle, as a demonstration of its interpretative function, was discussed in a separate chapter (Chapter 4).

Since any approach to discuss the jurisprudence on the precautionary principle requires an analysis of various cases under several institutions, therefore, one chapter was devoted to look into the decisions in the ECJ, ICJ, ITLOS, WTO and the ECHR. The caveat was that the case analysis under this chapter, at the end, does not provide a single, all-encompassing formula for the application of the principle. However, despite the different characteristics of each institution, and the varying position of the precautionary principle in each and every one of them, this chapter aimed to demonstrate the practicality of the principle and its applicability as a guiding instrument in the hands of the tribunals. Chapters three and four concluded the evaluation of the precautionary principle. A synthesis of both chapters recommended a precautionary test, based on which investment tribunals could assess whether the disputed policy to protect the environment from a future harm fits well within the benchmark that environmental law has developed. The test comprises of several questions designed to address the main elements of the principle, as established by various international instruments. The main questions are:

- Which Standard of Review is being adopted?
- Are there reasonable grounds for concern?
- What is the degree of the potential adverse effects (seriousness, severity, irreversibility)?
- How were the measure and concerns were communicated?

- What type of measure was adopted?

The precautionary test provides a background for the measure (through questions two to four), instead of evaluating the measure out of the context. Therefore, as much as the effectiveness and proportionality of a measure are crucial to decide if it has violated investment provisions, the test could walk the tribunal through a set of important facts, recognized under environmental law, to assist them in understanding the motives behind an environment-related policy. Moreover, compressing all those elements into a set of questions would improve the practicality of the test by asking direct questions instead of listing some terms that would, again, call for interpretation. Therefore, the format of the test raises the chance of it becoming a benchmark to be applied by subsequent tribunals. In any case, enough room should be left for the specifics of each case. The precautionary test provided in this thesis that it is not exhaustive and could accommodate as many specific questions as a case might require. Once again, the cardinal point here is to encourage the tribunals to understand what triggered each measure, and what is at stake, before deciding based on comparing the volume of loss that was imposed on the investor and the restrictive measure.

Before operationalizing the precautionary principle, chapter five focused on more ‘systemic considerations’, and explored how the principle could be applied by investment tribunals to identify if a violation of an investment treaty had occurred. To this effect, chapter five explored the treaty interpretation methods under Article 31 of the VCLT. This allowed it to balance the obligations of the states under investment treaties with their concerns over environmental protection. In doing so, two different paths were explored to evaluate how the precautionary principle could assist investment tribunals in their interpretation according to the international law interpretation mechanisms, namely: evolutionary interpretation and systemic interpretation.

To advocate an evolutionary interpretation of the investment treaty provisions, it was argued that the vague meaning of these provisions, specifically the FET and regulatory expropriation, required tribunals to perform a gap-filing function when lacuna existed in the applicable law. In this context, the precautionary principle, as a soft law instrument under international law, can inform the interpretation and application of the binding text of investment treaties and their provisions. Therefore, it can shape the outcome of the decisions. An evolutionary interpretation begins with looking at the text of the treaty and its ordinary meaning in the light of the original object and purpose of the treaty

according to Article 31.1 VCLT. This article raises two critical matters: the object and purpose of an investment treaty and the principle of contemporaneity. It was concluded that in light of the fact that sustainable development is the underlying long-term purpose of most recent investment treaties, the broad terms employed in investment treaties, such as fair and equitable treatment or indirect expropriation, must be interpreted in accordance with their current object, and with the purpose of the applicable treaty existing at the time its application.

The precautionary principle is one of the most crucial components of sustainable development, and in light of the current object and purpose of the investment treaties, could be relevant in interpreting treaty provisions. However, one should be cautious in conducting an evolutionary interpretation, which draws its legitimacy from a style of interpretation that appears to be reasonably faithful to the authoritative text.

The second suggested path is the principle of systemic integration. Being based on Article 31.3.c of the VCLT, this principle could function in two different ways to apply the precautionary principle: general and specific. The general application of the principle is attainable by going beyond the boundaries of orthodox sources of international law. Specifically, this involves taking into account non-binding instruments as serviceable tools to inform interpretation. The second and more limited application of the principle is through the obligation of due diligence, as acknowledged by the ICJ and ITLOS tribunals.

For a general application of the precautionary principle, the general requirements for qualifying a rule for its application under the article 31.3.c were analysed: being relevant, being a rule of international law and being applicable between the parties. Among these elements, being a rule of international law might appear to be problematic, as the principle is a soft law instrument. It was argued that, soft law, as a modern source of international law, could assist tribunals in their decisions. These soft law instruments, although lacking a binding character, are sometimes used to 'interpret and fill the gaps in the law'. This issue has also been recognised by numerous investment treaty tribunals. This practice is precisely what this thesis is advocating as a function of the precautionary principle for investment tribunals, with respect to environment-related investment disputes.

In addition to a general application of the precautionary principle through Article 31.3.c, investment tribunals could also apply the precautionary principle in some limited situations as an inherent part of a state's due diligence to protect the environment. It is

limited and specific due to the fact that there is no general obligation under international law to protect the environment by attaching a general obligation of due diligence to a state's responsibility. Therefore, where states have an obligation to protect a certain aspect of the environment, such as biodiversity, climate change, waste disposal, etc., they are assumed to have a duty of diligence to ensure that the specific aspect of the environment is protected. A decision by the ITLOS tribunal recognised the precautionary principle as being relevant to (and embodied in) the state's obligation of due diligence. The tribunal argued that, where applicable, investment tribunals could refer to the obligation of due diligence in interpreting treaty provisions according to the precautionary principle.

Besides strengthening the status of the precautionary principle in international law, this affirmation also clarifies how an obligation of due diligence necessarily implies an obligation of precaution. Substantiating due diligence as a result of the precautionary principle could develop the procedural duties of precaution, the breach of which could trigger a state's responsibility. This could allow for further development in international environmental law.

The outcome of the theoretical justification for applying the precautionary principle was that it does not need to be binding, or to be applied in a normative way. On the contrary, the principle has the potential to integrate economic development with environmental protection by posing certain questions. In the final section, the principle's scope of application was put to the test. For this purpose, the precautionary principle was experimented with two different disputes, both under the same treaty and against the same host state, to speculate as to what differences it could have made. In addition, a pending case was also added to the experiment to provide a hypothetical scenario if the test had been applied.

The issue around which this chapter revolved was whether the precautionary principle could be used to review a disputed state policy and determine whether the measure in question was intended to protect the environment, rather than being a protectionist attempt to interrupt the investment of the claimant. This chapter proved that the principle could assist investment tribunals in taking into account the environmental concerns that triggered the measure. It also demonstrated the principle's ability to provide a benchmark, against which the measure could be assessed. Therefore, it

functions as a double-edged sword that can objectively accommodate the interests of both sides of a dispute.

This chapter did not ultimately prescribe which method is best suited to applying the precautionary principle. The main purpose of this research was instead to introduce the principle as a way of thinking, and as a perception that has solid legal foundations and is technically applicable through the means of treaty interpretation. Therefore, under this study, which method the tribunal believes to be appropriate is not vital, as long as it incorporates the precautionary test as an objective method. In doing so, tribunals could set a footprint for future arbitrators in settling environment-related investment disputes, which would fulfil the main objective of this thesis.

As a final conclusion, according to the author of this thesis, the precautionary principle integrates the whole of international law in terms of interpreting environmental concerns and investment obligations. It also facilitates unity in fragmentation. In this way, the present thesis as a whole conforms to Plato's metaphor. Since knowledge is the way out of the 'cave', this thesis has striven to release the investment tribunals ('the captive') from the 'chains' of an incomplete understanding of environmental concerns, that so far have bound 'the captive' and forced him to gaze at shadows on the wall, without really comprehending the true nature behind them.

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